IAP9 Rec'd PCT/PTO 18 MAY 2006.

SEQUENCE LISTING

```
<110> Keio University
 <120> PROTEIN FORMING COMPLEX WITH c-Jun PROTEIN, NUCLEIC ACID ENCODING THE SAME
AND METHOD OF USING THE SAME
 <130> P595-C4285
 <150>
       JP 2003-389676
 <151>
      2003-11-19
 <160>
       299
 <210>
       102
 <211>
 <212>
       PRT
 <213>
       Mus musculus
 <400> 1
Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu
1 5 10 15
Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu
20 25 30
Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr
Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu His 50 55 60
Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Leu Lys Leu Ser Thr
                    70
85
                                     90
_Glu Glu Glu Ser Asp Ser
            100
<210>
 <211> 86
 <212> PRT
 <213> Mus musculus
Val Glu Gly Ser Ala Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu

1 10 15
Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala
Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln
Ser Val Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro
                        55
                                            60
Ala Pro Glu Gln Leu Cys Asp Met Ser Leu His Val Asp His Glu Val 65 70 75 80
Thr Ile Asn Gln Thr Thr
                85
<210>
<211> 84
 <212>
       PRT
<213> Mus musculus
<400>
Ser Ala Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu 1 5 10 15
                                    10
Arg Lys Glu Glu Ghr Ghn Leu Arg Leu Lys Ala Ala Leu His Asp
```

Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile 40 45 Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu 55 60 Gln Leu Cys Asp Met Ser Leu His Val Asp His Glu Val Thr Ile Asn Gln Thr Thr Leu <210> 83 <211>

<212> PRT

<213> Mus musculus

<400> 4 Ser Ala Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu 10 Arg Lys Glu Glu Glu Thr Gln Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile 35 40 Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu 55 60 Gln Leu Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn 65 70 75 80 Gln Lys Leu

<210> 83 <211> <212> PRT <213> Mus musculus

<400> Ser Ala Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu 10 Arg Lys Glu Glu Glu Thr Gln Leu Ḥis Leu Lys Ala Ala Leu His Asp 20 25 Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile 35 40 45 Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu 55 60 Gln Leu Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn 65 70 75 80 Gln Lys Leu

<210> 6 <211> 83 <212> PRT <213> Mus musculus

<400> Şer Ala Leu Arg Lys Trp Lys Gly Val Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp 20 Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu 50 60 Gln Leu Cys Asp Met Ser Leu His Val Asp His Glu Val Thr Ile Asn 65 70 75 80 Gln Ser Lys

```
<210>
<211> 65
       PRT
<212>
<213> Mus musculus
<400>
Şer Ala Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu
                                      10
Arg Lys Glu Glu Glu Thr Gln Leu Arg Leu Lys Ala Ala Leu His Asp
                                  25
Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile
                             40
                                                  45
Asn Ser Arg Arg Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu
                         55
ser
65
<210>
      75
<211>
<212>
       PRT
<213> Mus musculus
<400>
Ala Leu Arg Lys <u>T</u>rp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg
                                      10
Lys Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln
Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn 35 40 45
Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln
                         55
Leu Cys Asp Met Ser Leu His Val Asp Asn Glu
                     70
<210>
<211> 95
<212> PRT
<213> Mus musculus
<400> 9
Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 10 	 15
Glu Glu Glu Thr Leu Leu Arg Gln Lys Ala Ala Leu His Asp Gln Leu
20 25 30
Asn Arg Leu Lys Val Glu Glu Leu Pro Leu Gln Ser Met Ile Asn Ser
Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu
                         55
Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr
65 70 75 80
Thr Leu Lys Leu Ser Thr Arg Ser Pro Met Glu Glu Lys Glu Glu
                                      90
                                                           95
<210>
       10
<211>
       82
<212>
       PRT
<213>
      Mus musculus
<400> 10
Pro Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 1 5 10 15
Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu
```

Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser 35 40 45 Arg Glv Arg The Clu T Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 50 55 60 Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 Thr Arg <210> 11 <211> 82 <212> PRT <213> Mus musculus <400> 11 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys
1 10 15 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser 35 40 45 Arg Gly Arg Thr Glu Thr Leu Ser Phe Gln Pro Ala Pro Glu Gln Leu 50 _____ 60 ____ 60 ____ Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 Thr Arg <210> 12 <211> 61 <212> PRT <213> Mus musculus <400> 12 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 1 10 15 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 _ _ _ 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser 35 40 45 Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Arg 50 55 60 <210> 13 <211> 53 <212> PRT <213> Mus musculus <400> 13 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Arg Glu Leu Arg Lys 1 10 15 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser 35 40 45

<210> 14 <211> 51

50

<212> PRT <213> Mus musculus

Arg Gly Arg Thr Glu

<210> 15 <211> 86 <212> PRT

<213> Mus musculus

<210> 16 <211> 82 <212> PRT <213> Mus musculus

<210> 17 <211> 95 <212> PRT <213> Mus musculus

```
Thr Leu Lys Leu Ser Thr Arg Ser Pro Met Glu Glu Glu Val
<210>
       95
<211>
<212>
       PRT
       Mus musculus
<213>
<400> 18
Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 10 	 10
                                     10
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu
Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser
                                                  45
Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu
                        55
Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80
Thr Leu Lys Leu Ser Thr Arg Ser Pro Met Glu Glu Glu Gly Arg
<210>
       19
<211>
       82
<212>
       PRT
<213>
       Mus musculus
<400> 19
Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys
                                     10
Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu
                                                      30
Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser
        35
Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu
                        55
Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr
65
Thr Leu
<210>
       20
<211>
       82
<212>
       PRT
<213>
      Mus musculus
<400> 20
Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys
Glu Glu Glu Thr Leu Leu Arg Leu Arg Ala Ala Leu His Asp Gln Leu
20 25 30
Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser
        35.
                            40
                                                 45
Arg Gly Arg Thr Glu Thr Pro Ser Ser Gln Pro Ala Pro Glu Gln Leu
                        55
                                             60
Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr
65
Thr Leu
<210>
       21
<211>
       81
```

<212>

PRT <213> Mus musculus

<400> 21 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 10 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 55 60 Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 Thr

<210> 22 <211> 82 <212> PRT

<213> Mus musculus

<400> 22 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser 35 40 45 45 Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 55 Cys Asp Met Ser Leu His Val Asp Asn Lys Val Thr Ile Asn Gln Thr 65 70 75 80 Thr Pro

<210> 23 <211> 82 <212> PRT <213> Mus musculus

<400> 23 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg Leu Asn Ala Ala Leu His Asp Gln Leu 20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 55 60

Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 Thr Leu

<210> 24 82 <211> <212> PRT <213> Mus musculus

<400> Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Asn 10 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser

Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 50 60 Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 Thr Leu 25 <210>

<211> 82 <212> PRT <213> Mus musculus

<400> 25 Leu Arg Lys Trp Lys Gly Met Leu Ser Gln Leu Gln Glu Leu Arg Lys 1 5 10 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 _ _ _ 25 _ 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Val Pro Glu Gln Leu 50 60 Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 Thr Leu

<210> 26 <211> 82 <212> PRT

<213> Mus musculus

<400> 26 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu
20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 50 _____ 60 ____ 60 ____ Cys Asp Met Ser Leu His Val Asp Ser Glu Val Thr Ile Asn Gln Thr 65 70 75 80 His Lys

<210> 27 <211> 82 <212> PRT <213> Mus musculus

<400> 27 Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 1 10 15 Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu 20 25 30 Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu 50 60 Cys Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr 65 70 75 80 His Lys

```
<210> 28
<211> 63
<212> PRT
<213> Mus musculus
<400> 28
Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys
1 10 15
Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu
20 _____ 25 ___ 30
Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser
35 40 45
Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Ser 50 55 60
<210>
       29
<211> 63
<212>
       PRT
      Mus musculus
<213>
<400> 29
Leu Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 10 \phantom{000} 15
Glu Glu Glu Thr Leu Leu Arg Leu Asn Ala Ala Leu His Asp Gln Leu
20 25 30
Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser
Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Ser
                         55
<210> 30
<211>
       60
<212> PRT
<213> Mus musculus
<400> 30
Gln Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys 1 10 15
Glu Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu
20 _ _ _ 25 _ 30
Asn Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser
Arg Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala 50 55 60
<210> 31
<211> 81
<212> PRT
<213> Mus musculus
<400> 31
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn 20 25 30
Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys 50 60
```

Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr His 70 75 80

Ser

```
<210> 32
<211> 48
<212>
       PRT
      Mus musculus
<400> 32
Phe Leu Val Asn Glu Gly Trp Ser Gln Leu Ala Ala Met His Cys Val 1 5 15
Met Leu Pro Asp Leu Leu Gly Leu Glu Arg Phe Arg Pro Pro Leu Leu 20 25 30
Glu Met Leu Ala Arg Arg Trp Gln Asp Arg Cys Leu Glu Val Arg Glu
35 40 45
<210>
       33
       50
<211>
<212>
       PRT
<213>
      Mus musculus
<400> 33
Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu
1 10 15
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn 20 _ _ 30
Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
40
45
Gly Arg
50
<210> 34
<211> 81
<212>
       PRT
<213> Mus musculus
<400> 34
Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu
10 15
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn 20 25 30
Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys 50 60
Asp Met Ser Leu His Val Asp His Glu Val Thr Ile Asn Gln Thr Thr 65 70 75 80
Leu
<210> 35
<211> 81 <217> PR
       PRT
<213> Mus musculus
Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu

1 10 15
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn 20 25 30
Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys
50 60
Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr 65 70 75 80
```

```
<210>
      36
<211> 81
       PRT
<212>
<213>
      Mus musculus
<400> 36
Arg Lys Trp Lys Gly Met Leu Ser Gln Leu Gln Glu Leu Arg Lys Glu

1 10 15
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn
20 25 30
Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys 50 60
Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr 65 70 75 80
Pro
<210> 37
<211> 81
<212>
       PRT
<213>
      Mus musculus
<400> 37
Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Met Glu 10 15
Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn 20 25 30
Leu Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys 50 60
Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Leu Thr Thr 65 70 75 80
Pro
<210> 38
<211> 81
<212>
       PRT
<213> Mus musculus
<400> 38
Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu

1 10 15
Glu Glu Thr Leu Leu Arg Leu Asn Ala Ala Leu His Asp Gln Leu Asn
                                  25
Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg
Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys 50 60
Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr 65 70 75 80
65
Pro
```

<210> 39 <211> 81

<212> PRT <213> Mus musculus

<210> 40 <211> 81 <212> PRT <213> Mus musculus

50 55 60
Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr
65 70 75 80
Thr

<210> 41 <211> 81 <212> PRT <213> Mus musculus

<210> 42 <211> 81 <212> PRT <213> Mus musculus

Arg Lys Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu 1 10 15 Glu Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn 20 Arg Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg 40 45 Gly Arg Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys 50 Asp Met Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Arg 65 70 75 80

<210> 44 <211> 81 <212> PRT <213> Mus musculus

<210> 45 <211> 81 <212> PRT <213> Mus musculus

```
<210>
      46
<211> 49
       PRT
<212>
      Mus musculus
<213>
<400> 46
Lys Trp Lys Gly Met Leu Ser Arg Leu Lys Glu Leu Arg Lys Glu Glu

1 10 15
Glu Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg
20 25 30
Leu Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly
35 40 45
Arg
<210> 47
<211> 79
<212>
      PRT
<213> Mus musculus
<400> 47
Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu 10 15
Thr Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu 20 25 30
Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg
35 40 45
Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met 50 55 60
Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Leu
<210> 48
<211> 79
<212>
       PRT
<213> Mus musculus
<400> 48
Trp Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu 1_{\underline{\phantom{0}}} 5 10 15
Ala Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu 20 25 30
Lys Val Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg
35 40 45
Thr Glu Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met
                          55
Ser Leu His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Leu 65 70 75
<210> 49
<211> 47
<212>
       PRT
<213> Mus musculus
<400> 49
Lys Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr
5 _ _ 10 _ 15
Leu Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys 20 25 30
```

Val Lys Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg 35 40 45

```
<211> 90
<212>
        PRT
       Mus musculus
<400> 50
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu

1 10 15
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
35 40 45
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 60
His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Leu Lys Leu Ser 65 70 75 80
Thr Arg Ser Pro Met Glu Glu Glu Glu Gly
<210> 51
<211> 77
<212>
       PRT
<213> Mus musculus
<400> 51
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu

1 10 15 _____ 10 15 ____
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
20 25 30
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
35 40 45
Ala Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Thr Ser Leu 50 60
His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Leu 70 75
<210> 52
<211> 77
<212> PRT
<213> Mus musculus
<400>
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu 10 15 15
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
35 40 45
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 55 60
His Val Asp Asn Glu Val Thr Ile Asn Gln Thr His Ser
                      70
<210> 53
<211> 77
<212>
      PRT
<213> Mus musculus
<400> 53
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu

1 10 15
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
```

Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu 35 40 45

```
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 60
His Val Asp Asn Glu Val Ala Ile Asn Gln Thr Thr Pro
                    70
<210>
       54
       77
<211>
<212>
       PRT
<213>
       Mus musculus
<400>
       54
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
                                     10
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
20 25 30
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 60
His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Pro
<210>
       55
<211> 76
<212>
       PRT
<213>
      Mus musculus
<400>
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
                                     10
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
20 25 30
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Glu Arg Thr Glu
Thr Leu Ser Ser Arg Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 60
His Val Asp Asn Glu Val Thr Ile Asn Gln Thr Thr
<210> 56
<211>
      76
<212>
       PRT
<213>
      Mus musculus
<400> 56
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
20 25 30
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 60
His Val Asp Asn Glu Val Thr Ile Asp Gln Gly Ala
<210>
       57
      74
<211>
<212>
       PRT
<213>
      Mus musculus
<400>
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Thr Leu
```

```
Leu Arg Leu Lys Ala Ala Leu His Asn Gln Leu Asn Arg Leu Lys Val
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
                             40
                                                  45
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu 50 60
                                              60
His Val Asp Asn Glu Val Thr Ile Asn Gln
65 70
<210>
       58
       69
<211>
<212>
      PRT
<213>
       Mus musculus
<400> 58
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
                             40
                                                  45
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu
    50
His Val Asp His Glu
65
<210>
      59
<211>
       69
<212>
       PRT
<213>
       Mus musculus
<400>
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
                                 25
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
                             40
                                                  45
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu
    50
His Val Asp Ile Glu
65
<210>
      60
<211>
       67
<212>
       PRT
<213>
      Mus musculus
<400> 60
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
20 25 30
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu
                             40
                                                  45
Thr Leu Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Thr Ser Leu 50 60
His Val Thr
65
<210>
       61
<211>
       46
```

<212>

<213>

PRT

Mus musculus

```
<400> 61
Gly Met Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
                                    10
Leu Arg Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val
                                                     30
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg
<210>
       62
<211>
      46
<212>
      PRT
<213>
      Mus musculus
<400> 62
Arg Met Leu Ser Gln Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu
Leu Arg Leu Lys Ala Thr Leu His Asp Gln Leu Asn Arg Leu Lys Val
Glu Glu Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Lys
<210>
       63
<211> 75
<212>
      PRT
      Mus musculus
<213>
<400> 63
Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg
Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu
                                25
Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu
                                                45
Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu His Val
                        55
Asp Asn Glu Val Thr Ile Asn Gln Thr Thr Leu
                  . 70
<210> 64
<211> 69
<212>
     PRT
<213> Mus musculus
<400> 64
Leu Ser Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg
                                   10
Leu Lys Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu
                                25
Leu Ala Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu
                            40
                                                45
Ser Ser Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu His Val
    50
                        55
                                            60
Asp Asn Glu Ala Thr
65
<210> 65
<211>
      66
<212>
      PRT
<213>
      Mus musculus
<400> 65
Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg Leu Lys
```

```
Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala
                                  25
                                                        30
Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser
                              40
Gln Pro Ala Pro Glu Gln Leu Cys Asp Met Ser Leu His Val Asp Asn 50 55 60
                          55
Glu Val
65
<210>
       66
<211>
       61
<212>
       PRT
<213>
       Mus musculus
<400> 66
Arg Leu Arg Glu Leu Arg Lys Glu Glu Lys Thr Leu Leu Arg Leu Lys
1 10 15
Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala
20 25 30
Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser
                              40
Gln Pro Ala Pro Glu Gln Cys Pro Tyr Met Leu Thr Thr
50 55 60
<210>
       67
<211> 61
<212> PRT
<213>
       Mus musculus
<400> 67
Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Leu Leu Arg Leu Lys
                                      10
Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala
Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser
35 40 45
                                                   45
Gln Pro Ala Pro Gly Gln Cys Pro Tyr Met Leu Thr Thr
50 55 60
<210> 68
<211> 61
<212>
       PRT
<213>
      Mus musculus
<400> 68
Arg Leu Gln Glu Leu Arg Lys Glu Glu Glu Thr Gln Leu Arg Leu Lys
1 10 15
Ala Ala Leu His Asp Gln Leu Asn Arg Leu Lys Val Glu Glu Leu Ala
            20
Leu Gln Ser Met Ile Asn Ser Arg Gly Arg Thr Glu Thr Leu Ser Ser
                              40
Gln Pro Ala Pro Glu Gln Cys Pro Tyr Met Leu Thr Thr 50 60
<210> 69
<211> 40
<212>
       PRT
<213> Mus musculus
<400> 69
```

Leu Gln Ser Met Ile Asn Ser Arg <210> <211> 956 <212> PRT <213> Mus musculus <400> Met Ala Asp Pro Ala Glu Cys Ser Ile Lys Val Met Cys Arg Phe Arg
1 10 15 Pro Leu Asn Glu Ala Glu Ile Leu Arg Gly Asp Lys Phe Ile Pro Lys Phe Lys Gly Glu Glu Thr Val Val Ile Gly Gln Gly Lys Pro Tyr Val
35 40 45 Phe Asp Arg Val Leu Pro Pro Asn Thr Thr Gln Glu Gln Val Tyr Asn 50 55 60 Ala Cys Ala Lys Gln Ile Val Lys Asp Val Leu Glu Gly Tyr Asn Gly 65 70 75 80 Thr Ile Phe Ala Tyr Gly Gln Thr Ser Ser Gly Lys Thr His Thr Met
85 90 95 Glu Gly Lys Leu His Asp Pro Gln Leu Met Gly Ile Ile Pro Arg Ile Ala His Asp Ile Phe Asp His Ile Tyr Ser Met Asp Glu Asn Leu Glu
115 120 125 Phe His Ile Lys Val Ser Tyr Phe Glu Ile Tyr Leu Asp Lys Ile Arg 130 140 Asp Leu Leu Asp Val Ser Lys Thr Asn Leu Ala Val His Glu Asp Lys
145 150 155 160 Asn Arg Val Pro Tyr Val Lys Gly Cys Thr Glu Arg Phe Val Ser Ser 165 170 Pro Glu Glu Val Met Asp Val Ile Asp Glu Gly Lys Ala Asn Arg His 185 180 190 Val Ala Val Thr Asn Met Asn Glu His Ser Ser Arg Ser His Ser Ile 195 205 200 Phe Leu Ile Asn Ile Lys Gln Glu Asn Val Glu Thr Glu Lys Lys Leu 215 220 Ser Gly Lys Leu Tyr Leu Val Asp Leu Ala Gly Ser Glu Lys Val Ser 230 235 Lys Thr Gly Ala Glu Gly Ala Val Leu Asp Glu Ala Lys Asn Ile Asn 245 250 255 Lys Ser Leu Ser Ala Leu Gly Asn Val Ile Ser Ala Leu Ala Glu Gly 260 270 Thr Lys Thr His Val Pro Tyr Arg Asp Ser Lys Met Thr Arg Ile Leu 275 280 285 Gln Asp Ser Leu Gly Gly Asn Cys Arg Thr Thr Ile Val Ile Cys Cys 290 295 300 300 Ser Pro Ser Val Phe Asn Glu Ala Glu Thr Lys Ser Thr Leu Met Phe 310 315 Gly Gln Arg Ala Lys Thr Ile Lys Asn Thr Val Ser Val Asn Leu Glu 325 330 335 330 Leu Thr Ala Glu Glu Trp Lys Lys Lys Tyr Glu Lys Glu Lys Glu Lys 340 350 Asn Lys Ala Leu Lys Ser Val Leu Gln His Leu Glu Met Glu Leu Asn 360 Arg Trp Arg Asn Gly Glu Ala Val Pro Glu Asp Glu Gln Ile Ser Ala 375 380 Lys Asp His Lys Ser Leu Glu Pro Cys Asp Asn Thr Pro Ile Ile Asp 385 390 395 400 400 Asn Ile Thr Pro Val Val Asp Gly Ile Ser Ala Glu Lys Glu Lys Tyr 405 410 415 Asp Glu Glu Ile Thr Ser Leu Tyr Arg Gln Leu Asp Asp Lys Asp Asp 420 425 430

Glu Ile Asn Gln Gln Ser Gln Leu Ala Glu Lys Leu Lys Gln Gln Met

Leu Asp Gln Asp Glu Leu Leu Ala Ser Thr Arg Arg Asp Tyr Glu Lys 455 460 Ile Gln Glu Glu Leu Thr Arg Leu Gln Ile Glu Asn Glu Ala Ala Lys 475 470 480 Asp Glu Val Lys Glu Val Leu Gln Ala Leu Glu Glu Leu Ala Val Asn 490 485 495 Tyr Asp Gln Lys Ser Gln Glu Val Glu Asp Lys Thr Arg Ala Asn Glu
500 510 Gln Leu Thr Asp Glu Leu Ala Gln Lys Thr Thr Thr Leu Thr Thr Thr 520 525 Gln Arg Glu Leu Ser Gln Leu Gln Glu Leu Ser Asn His Gln Lys Lys 540 535 Arg Ala Thr Glu Ile Leu Asn Leu Leu Leu Lys Asp Leu Gly Glu Ile 545 550 555 _ _ _ 560 Gly Gly Ile Ile Gly Thr Asn Asp Val Lys Thr Leu Ala Asp Val Asn
565 570 575 Gly Val Ile Glu Glu Glu Phe Thr Met Ala Arg Leu Tyr Ile Ser Lys 590 585 Met Lys Ser Glu Val Lys Ser Leu Val Asn Arg Ser Lys Gln Leu Glu 595 600 Ser Ala Gln Met Asp Ser Asn Arg Lys Met Asn Ala Ser Glu Arg Glu 610 615 620 Leu Ala Ala Cys Gln Leu Leu Ile Ser Gln His Glu Ala Lys Ile Lys 630 635 Ser Leu Thr Asp Tyr Met Gln Asn Met Glu Gln Lys Arg Arg Gln Leu 645 650 Glu Glu Ser Gln Asp Ser Leu Ser Glu Glu Leu Ala Lys Leu Arg Ala 660 665 670 Gln Glu Lys Met His Glu Val Ser Phe Gln Asp Lys Glu Lys Glu His 675 680 Leu Thr Arg Leu Gln Asp Ala Glu Glu Val Lys Lys Ala Leu Glu Gln 695 700 Gln Met Glu Ser His Arg Glu Ala His Gln Lys Gln Leu Ser Arg Leu 705 710 715 720 Arg Asp Glu Ile Glu Glu Lys Gln Arg Ile Ile Asp Glu Ile Arg Asp 725 730 735 Leu Asn Gln Lys Leu Gln Leu Glu Gln Glu Arg Leu Ser Ser Asp Tyr 740 745 750 _ Asn Lys Leu Lys Ile Glu Asp Gln Glu Arg Glu Val Lys Leu Glu Lys 755 760 765 Leu Leu Leu Asn Asp Lys Arg Glu Gln Ala Arg Glu Asp Leu Lys 770 775 780 Gly Leu Glu Glu Thr Val Ser Ile Glu Leu Gln Thr Leu His Asn Leu 785 790 795 800 Arg Lys Leu Phe Val Gln Asp Leu Thr Thr Arg Val Lys Lys Ser Val 810 Glu Leu Asp Ser Asp Asp Gly Gly Gly Ser Ala Ala Gln Lys Gln Lys 825 820 Ile Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys 840 845 Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu 855 850 860 Glu Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser 870 875 880 Ala Leu Lys Glu Ala Lys Glu Asn Ala Met Arg Asp Arg Lys Arg Tyr 885 895 890 Gln Gln Glu Val Asp Arg Ile Lys Glu Ala Val Arg Ala Lys Asn Met 900 905 910 Ala Arg Arg Ala His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly 915 920 925 His Tyr Pro Ala Ser Ser Pro Thr Ala Val His Ala Val Arg Gly Gly 930 935 940 Gly Gly Gly Ser Ser Asn Ser Thr His Tyr Gln Lys

```
<210> 71
<211> 61
```

<212> PRT

<213> Mus musculus

<210> 72 <211> 61 <212> PRT

<213> Mus musculus

<210> 73 <211> 61 <212> PRT

<213> Mus musculus

<210> 74 <211> 64 <212> PRT

<213> Mus musculus

<210> 75 <211> 64

```
<212> PRT
<213> Mus musculus
<400> 75
Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Phe Leu Glu Asn Asn Leu
                                    10
Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp
Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr Ala
Glu Arg Val Met Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu Arg
<210>
       76
<211>
      64
<212>
      PRT
<213>
      Mus musculus
<400> 76
Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Leu Leu Glu Asn Asn Leu
Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp
                                                     30
            20
Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr Ala
                                25
Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu Arg
    50
<210>
<211>
      64
<212>
      PRT
<213>
      Mus musculus
<400>
Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Phe Leu Glu Asn His Leu
                                    10
                                                         15
Glu Gln Leu Thr Lys Val His Lys Leu Leu Val Arg Asp Asn Ala Asp
            20
                                                     30
Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr Ala
                                                45
                            40
Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu Arg
    50
<210>
       78
<211>
      54
<212>
       PRT
<213>
      Mus musculus
<400> 78
Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala
Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr
                                                     30
Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu
        35
Asn Ala Met Arg Asp Arg
    50
<210>
       79
       54
<211>
<212>
       PRT
<213>
       Mus musculus
<400>
       79
```

Leu Glu Gln Leu Thr Arg Val His Lys Gln Leu Val Arg Asp Asn Ala 10 15 Asp Leu Arg Tyr Glu Leu His Lys Leu Glu Lys Arg Leu Arg Ala Thr 30 Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu 35 40 45 40 Asn Ala Met Arg Asp Arg 50 <210> 80 <211> 54 <212> PRT <213> Mus musculus <400> 80 Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr 25 30 Ala Lys Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu 35 40 45 Asn Ala Met Arg Asp Arg 50 <210> 81 <211> 54 <212> PRT <213> Mus musculus <400> 81 Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Gln Asp Asn Ala 10 Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr 25 Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu 35 45 40 Asn Ala Met Arg Asp Arg 50 <210> 82 <211> 61 <212> PRT <213> Mus musculus <400> 82 Ser Phe Leu Asp Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Arg Leu Glu 20 25 30 Lys Met Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala 40 Leu Lys Glu Ala Lys Glu Asn Ala Met Ser Asp Ala Lys 55 <210> 54 <211> <212> PRT Mus musculus <213>

Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala

Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr

<400> 83

```
Ala Lys Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys Glu 35 40 45
Asn Ala Met Arg Asp Arg
    50
<210>
       84
<211>
       49
<212>
       PRT
<213>
       Mus musculus
<400> 84
Ala Lys Thr Ile Lys Asn Thr Val Ser Val Asn Leu Glu Leu Thr Ala
1 10 15
Glu Glu Trp Lys Lys Glu Tyr Glu Lys Glu Lys Glu Lys Asn Lys Ala
20 25 30
Leu Lys Ser Val Leu Gln His Leu Glu Met Glu Leu Asn Arg Trp Arg
Glu
<210>
       85
<211>
       51
<212>
       PRT
<213>
      Mus musculus
<400> 85
Gln Arg Ala Lys Thr Ile Asn Asn Thr Val Ser Val Asn Leu Glu Leu
                                       10
Thr Ala Glu Glu Trp Lys Lys Arg Tyr Glu Lys Glu Lys Glu Lys Asn
20 25 30
Lys Ala Leu Lys Ser Val Leu Gln His Leu Glu Met Glu Leu Asn Arg
                              40
        35
Trp Arg Arg
    50
<210>
      86
<211> 48
<212>
      PRT
<213> Mus musculus
<400> 86
Gln Arg Ala Lys Ala Ile Lys Asn Thr Val Ser Val Asn Leu Glu Leu
Thr Ala Glu Glu Trp Lys Lys Lys Tyr Glu Lys Glu Lys Glu Lys Asn
20 25 _ 30
Lys Ala Leu Lys Asn Val Leu Gln His Leu Glu Met Glu Leu Asn Arg
35 40 45
<210>
       87
<211>
       70
<212>
       PRT
       Mus musculus
<213>
<400> 87
Cys Cys Ser Pro Ser Val Phe Asn Glu Ala Glu Thr Lys Ser Thr Leu
1 10 15
Met Phe Gly Gln Arg Ala Lys Thr Ile Lys Asn Thr Val Ser Val Asn 20 25 30
Leu Glu Leu Thr Ala Glu Glu Trp Lys Lys Lys Tyr Glu Lys Glu Lys 35 40 45
Glu Lys Asn Lys Ala Leu Lys Ser Val Leu Gln His Leu Glu Met Glu 50 60
```

Leu Asn Arg Trp Arg Asn

<210> 88 <211> 1027 <212> PRT

<213> Mus musculus

<400> Met Ala Glu Thr Asn Asn Glu Cys Ser Ile Lys Val Leu Cys Arg Phe 1 5 10 15 Arg Pro Leu Asn Gln Ala Glu Ile Leu Arg Gly Asp Lys Phe Ile Pro
20 25 30 Ile Phe Gln Gly Asp Asp Ser Val Ile Ile Gly Gly Lys Pro Tyr Val Phe Asp Arg Val Phe Pro Pro Asn Thr Thr Gln Glu Gln Val Tyr His
50 _____ 55 60 Ala Cys Ala Met Gln Ile Val Lys Asp Val Leu Ala Gly Tyr Asn Gly 65 70 75 80 Thr Ile Phe Ala Tyr Gly Gln Thr Ser Ser Gly Lys Thr His Thr Met 85 90 95 Glu Gly Lys Leu His Asp Pro Gln Leu Met Gly Ile Ile Pro Arg Ile 100 105 110 100 Ala Arg Asp Ile Phe Asn His Ile Tyr Ser Met Asp Glu Asn Leu Glu 115 120 125 Phe His Ile Lys Val Ser Tyr Phe Glu Ile Tyr Leu Asp Lys Ile Arg 130 140 Asp Leu Leu Asp Val Thr Lys Thr Asn Leu Ser Val His Glu Asp Lys
145 150 155 160 Asn Arg Val Pro Phe Val Lys Gly Cys Thr Glu Arg Phe Val Ser Ser 165 170 175 Pro Glu Glu Ile Leu Asp Val Ile Asp Glu Gly Lys Ser Asn Arg His 180 185 190 Val Ala Val Thr Asn Met Asn Glu His Ser Ser Arg Ser His Ser Ile 195 200 205 Phe Leu Ile Asn Ile Lys Gln Glu Asn Val Glu Thr Glu Gln Lys Leu 210 215 Ser Gly Lys Leu Tyr Leu Val Asp Leu Ala Gly Ser Glu Lys Val Ser 230 235 Lys Thr Gly Ala Glu Gly Ala Val Leu Asp Glu Ala Lys Asn Ile Asn 245 250 255 Lys Ser Leu Ser Ala Leu Gly Asn Val Ile Ser Ala Leu Ala Glu Gly 260 265 270 Thr Lys Ser Tyr Val Pro Tyr Arg Asp Thr Lys Met Thr Arg Ile Leu 275 280 285 Gln Asp Ser Leu Gly Gly Asn Cys Arg Thr Thr Met Phe Ile Cys Cys 290 295 300 Ser Pro Ser Ser Tyr Asn Asp Ala Glu Thr Lys Ser Thr Leu Met Phe 305 310 315 320 Gly Gln Arg Ala Lys Thr Ile Lys Asn Thr Ala Ser Val Asn Leu Glu 325 330 335 Leu Thr Ala Glu Gln Trp Lys Lys Lys Tyr Glu Lys Glu Lys Glu Lys
340 350 350 Thr Lys Ala Gln Lys Glu Thr Ile Ala Asn Val Glu Ala Glu Leu Ser 355 360 365 Arg Trp Arg Asn Gly Glu Asn Val Pro Glu Thr Glu Arg Leu Ala Gly 370 375 380 Glu Asp Ser Ala Leu Gly Ala Glu Leu Cys Glu Glu Thr Pro Val Asn 385 390 395 400 Asp Asn Ser Ser Ile Val Val Arg Ile Ala Pro Glu Glu Arg Gln Lys
405
410
415 Tyr Glu Glu Ile Arg Arg Leu Tyr Lys Gln Leu Asp Asp Lys Asp 420 430 430 Asp Glu Ile Asn Gln Gln Ser Gln Leu Ile Glu Lys Leu Lys Gln Gln 440

Met Leu Asp Gln Glu Glu Leu Leu Val Ser Thr Arg Gly Asp Asn Glu 46Ō Lys Val Gln Arg Glu Leu Ser His Leu Gln Ser Glu Asn Asp Ala Ala Lys Asp Glu Val Lys Glu Val Leu Gln Ala Leu Glu Glu Leu Ala Val Asn Tyr Asp Gln Lys Ser Gln Glu Val Glu Glu Lys Ser Gln Gln Asn 500 505 510 Gln Leu Leu Val Asp Glu Leu Ser Gln Lys Val Ala Thr Met Leu Ser 515 520 525 Leu Glu Ser Glu Leu Gln Arg Leu Gln Glu Val Ser Gly His Gln Arg Lys Arg Ile Ala Glu Val Leu Asn Gly Leu Met Arg Asp Leu Ser Glu Phe Ser Val Ile Val Gly Asn Gly Glu Ile Lys Leu Pro Val Glu Ile Ser Gly Ala Ile Glu Glu Glu Phe Thr Val Ala Arg Leu Tyr Ile Ser Lys Ile Lys Ser Glu Val Lys Ser Val Val Lys Arg Cys Arg Gln Leu Glu Asn Leu Gln Val Glu Cys His Arg Lys Met Glu Val Thr Gly Arg Glu Leu Ser Ser Cys Gln Leu Leu Ile Ser Gln His Glu Ala Lys Ile Arg Ser Leu Thr Glu Tyr Met Gln Thr Val Glu Leu Lys Lys Arg His Leu Glu Glu Ser Tyr Asp Ser Leu Ser Asp Glu Leu Ala Arg Leu Gln Ala His Glu Thr Val His Glu Val Ala Leu Lys Asp Lys Glu Pro Asp Thr Gln Asp Ala Glu Glu Val Lys Lys Ala Leu Glu Leu Gln Met Glu Asn His Arg Glu Ala His His Arg Gln Leu Ala Arg Leu Arg Asp Glu Ile Asn Glu Lys Gln Lys Thr Ile Asp Glu Leu Lys Asp Leu Asn Gln Lys Leu Gin Leu Giu Leu Giu Lys Leu Gin Ala Asp Tyr Glu Arg Leu Lys Asn Glu Glu Asn Glu Lys Ser Ala Lys Leu Gln Glu Leu Thr Phe Leu Tyr Glu Arg His Glu Gln Ser Lys Gln Asp Leu Lys Gly Leu Glu 770 780 Glu Thr Val Ala Arg Glu Leu Gln Thr Leu His Asn Leu Arg Lys Leu Phe Val Gln Asp Val Thr Thr Arg Val Lys Lys Ser Ala Glu Met Glu Pro Glu Asp Ser Gly Gly Ile His Ser Gln Lys Gln Lys Ile Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg 850 855 860 Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Gly Ala Leu Lys Glu Ala Lys Glu Gly Ala Met Lys Asp Lys Arg Arg Tyr Gln Gln Glu Val Asp Arg Ile Lys Glu Ala Val Arg Tyr Lys Ser Ser Gly Lys Arg Gly His Ser Ala Gln Ile Ala Lys Pro Val Arg Pro Gly His Tyr Pro 915 920 925 Ala Ser Ser Pro Thr Asn Pro Tyr Gly Thr Arg Ser Pro Glu Cys Ile 930 940 Ser Tyr Thr Asn Asn Leu Phe Gln Asn Tyr Gln Asn Leu His Leu Gln

```
Ala Ala Pro Ser Ser Thr Ser Asp Met Tyr Phe Ala Ser Ser Gly Arg
965 970 975
                 965
Thr Ser Val Ala Pro Leu Ala Ser Tyr Gln Lys Ala Asn Met Asp Asn 980 985 990
Gly Asn Ala Thr Asp Ile Asn Asp Asn Arg Ser Asp Leu Pro Cys Gly 995 1000 1005
Tyr Glu Ala Glu Asp Gln Ala Lys Leu Phe Pro Leu His Gln Glu
1010 1015 1020
Thr Ala Ala Ser
    1025
<210> 89
       52
<211>
<211> 52
<212> PRT
<213> Mus musculus
<400> 89
Ile Ser Phe Leu Lys Asn Asn Leu Glu Arg Leu Thr Lys Val His Lys 1 10 15
Gin Leu Vai Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu
                                   25
             20
                                                         30
Glu Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Gly
Ala Leu Lys Gly
    50
<210> 90
<211>
      59
<212>
      PRT
<213> Mus musculus
<400> 90
Gln Lys Gln Lys Ile Ser Phe Leu Glu Asp Asn Leu Glu Gln Leu Thr 1 5 15
Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu
20 25 30
Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys
35 40 45
Ala Leu Glu Gly Ala Leu Lys Glu Gly Lys Glu
50 55
<210> 91
<211>
      62
<212>
      PRT
<213> Mus musculus
<400> 91
His Ser Gln Lys Gln Lys Ile Ser Phe Leu Glu Asn Asn Leu Glu Gln
Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn Ala Asp Leu Arg
20 25 30
Cys Glu Leu Pro Lys Leu Glu Lys Gln Leu Arg Ala Thr Ala Glu Arg
Val Lys Ala Leu Glu Gly Thr Leu Lys Glu Ala Lys Glu Gly
50 55 60
<210>
       92
       62
<211>
<212>
       PRT
<213>
       Mus musculus
<400> 92
Arg Ile Pro Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val
```

```
His Lys Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro
Lys Leu Glu Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu
35 40 45
Glu Gly Ala Leu Lys Glu Ala Lys Glu Gly Ala Met Lys Asp 50 55 60
       93
<210>
<211>
        59
<212>
       PRT
       Mus musculus
<213>
<400> 93
Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln
1 5 10 15
Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu
20 25 30
Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Gly Ala 35 40 45
Leu Lys Glu Ala Lys Glu Gly Ala Met Lys Asp 50 55
<210> 94
<211>
       12
<212> PRT
<213> Mus musculus
<400> 94
Gln Lys Tyr Glu Glu Glu Ile Arg Arg Leu Tyr Lys
<210>
       281
<211>
<212>
       PRT
<213> Mus musculus
<400> 95
Met Ala Thr Asn Phe Leu Ala His Glu Lys Ile Trp Phe Asp Lys Phe 1 5 15
Lys Tyr Asp Asp Ala Glu Arg Arg Phe Tyr Glu Gln Met Asn Gly Pro
Val Thr Ser Gly Ser Arg Gln Glu Asn Gly Ala Ser Val Ile Leu Arg
Asp Ile Ala Arg Ala Arg Glu Asn Ile Gln Lys Ser Leu Ala Gly Ser 50 60
Ser Gly Pro Gly Ala Ser Ser Gly Pro Gly Gly Asp His Ser Glu Leu 65 70 75 80
Ile Val Arg Ile Thr Ser Leu Glu Val Glu Asn Gln Asn Leu Arg Gly
                                        90
Val Val Gln Asp Leu Gln Gln Ala Ile Ser Lys Leu Glu Ala Arg Leu
100 105 110
Ser Ser Leu Glu Lys Ser Ser Pro Thr Pro Arg Ala Thr Ala Pro Gln
115 120 125
Thr Gln His Val Ser Pro Met Arg Gln Val Glu Pro Pro Thr Lys Lys
                                                 140
                          135
Gly Ala Thr Pro Ala Glu Asp Asp Glu Asp Lys Asp Ile Asp Leu Phe
145 150 155 160
Gly Ser Asp Glu Glu Glu Glu Asp Lys Glu Ala Ala Arg Leu Arg Glu
165 170 175
Glu Arg Leu Arg Gln Tyr Ala Glu Lys Lys Ala Lys Lys Pro Thr Leu
180 185 190
Val Ala Lys Ser Ser Ile Leu Leu Asp Val Lys Pro Trp Asp Asp Glu
195 200 205
```

```
Thr Asp Met Ala Gln Leu Glu Thr Cys Val Arg Ser Ile Gln Leu Asp
    210
                                              220
                         215
Gly Leu Val Trp Gly Ala Ser Lys Leu Val Pro Val Gly Tyr Gly Ile
                    230
                                         235
                                                              240
Arg Lys Leu Gln Ile Gln Cys Val Val Glu Asp Asp Lys Val Gly Thr
                245
                                     250
                                                          255
Asp Leu Leu Glu Glu Glu Ile Thr Lys Phe Glu Glu His Val Gln Ser 260 265 270
Val Asp Ile Ala Ala Phe Asp Lys
275 280
<210>
       96
       73
<211>
<212>
      PRT
       Mus musculus
<213>
<400> 96
Glu Leu Ile Val Arg Ile Thr Ser Leu Glu Val Glu Asn Gln Asn Leu
                                     10
Arg Gly Val Yal Gln Asp Leu Gln Gln Ala Ile Ser Lys Leu Glu Ala
                                 25
                                                      30
Arg Leu Ser Ser Leu Glu Lys Ser Ser Pro Thr Pro Arg Ala Thr Ala
                             40
Pro Gln Thr Gln His Val Ser Pro Met Arg Gln Val Glu Pro Pro Thr
                        55
Lys Lys Gly Ala Thr Pro Ala Glu Val
65 70
<210>
<211>
      66
<212> PRT
<213> Mus musculus
<400> 97
Ile Thr Ser Leu Glu Val Glu Asn Gln Asn Leu Arg Gly Val Val Gln
                                                          15
Asp Leu Gln Gln Ala Ile Ser Lys Leu Glu Ala Arg Leu Ser Ser Leu
                                 25
Glu Lys Ser Ser Pro Thr Pro Arg Ala Thr Thr Pro Gln Thr Gln His
                            40
                                                  45
Val Ser Pro Met Arg Gln Val Glu Pro Pro Thr Lys Lys Gly Ala Thr
    50
Pro Ala
65
<210>
       98
<211>
      89
<212>
      PRT
<213>
      Mus musculus
<220>
<221>
       UNSURE
<222>
       (57)
<400>
Asp His Ser Glu Leu Ile Val Arg Ile Thr Ser Leu Glu Val Glu Asn
                                     10
Gln Asn Leu Arg Gly Val Val Gln Asp Leu Gln Gln Ala Ile Ser Lys
            20
                                 25
                                                      30
Leu Glu Ala Arg Leu Ser Ser Leu Glu Lys Ser Ser Pro Thr Pro Arg
Ala Thr Ala Pro Gln Thr Gln His Xaa Phe Pro Leu Arg Gln Val Glu
```

Pro Pro Thr Lys Lys Gly Ala Thr Pro Ala Glu Asp Asp Glu Asp Lys

```
75
                                                                   80
Asp Ile Asp Leu Phe Gly Arg Asn Glu
<210>
       99
       118
<211>
<212>
       PRT
       Mus musculus
<213>
<400> 99
Glu Gln Met Asn Gly Pro Val Thr Ser Ser Ser Arg Gln Glu Asn Gly
10 15
Ala Ser Val Ile Leu Arg Asp Ile Ala Arg Pro Arg Glu Asn Ile Gln
Lys Ser Leu Ala Gly Ser Ser Gly Pro Gly Ala Ser Ser Gly Pro Gly
                               40
                                                     45
Gly Asp His Ser Glu Leu Ile Val Arg Ile Thr Ser Leu Glu Val Glu 50 60
Asn Gln Asn Leu Arg Gly Val Val Gln Asp Leu Gln Gln Ala Ile Ser
65 70 75 80
Lys Leu Glu Ala Arg Leu Ser Ser Leu Glu Lys Ser Ser Pro Thr Pro 85 90 95
Arg Ala Thr Ala Pro Gln Thr Gln His Val Ser Pro Leu Arg Gln Val
Glu Pro Pro Thr Lys Arg
         115
<210>
       100
<211>
       849
<212>
       PRT
<213>
       Mus musculus
<400> 100
Met Ser Tyr Thr Leu Asp Ser Leu Gly Asn Pro Ser Ala Tyr Arg Arg
Val Pro Thr Glu Thr Arg Ser Ser Phe Ser Arg Val Ser Gly Ser Pro
20 25 30
Ser Ser Gly Phe Arg Ser Gln Ser Trp Ser Arg Gly Ser Pro Ser Thr
35 40 45
Val Ser Ser Ser Tyr Thr Arg Ser Ala Val Ala Pro Arg Leu Ala Tyr 50 60 ____
Ser Ser Ala Met Leu Ser Ser Ala Glu Ser Ser Leu Asp Phe Ser Gln 65 70 _ _ 75 80
Ser Ser Ser Leu Leu Asn Gly Gly Ser Gly Gly Asp Tyr Lys Leu Ser
85 90 95
Arg Ser Asn Glu Lys Glu Gln Leu Gln Gly Leu Asn Asp Arg Phe Ala
                                    105
Gly Tyr Ile Glu Lys Val His Tyr Leu Glu Gln Gln Asn Lys Glu Ile
115 120 125
Glu Ala Glu Ile Gln Ala Leu Arg Gln Lys Gln Ala Ser His Ala Gln
                          135
                                                 140
Leu Gly Asp Ala Tyr Asp Gln Glu Ile Arg Glu Leu Arg Ala Thr Leu
145 150 155 160
                                            155
Glu Met Val Asn His Glu Lys Ala Gln Val Gln Leu Asp Ser Asp His
Leu Glu Glu Asp Ile His Arg Leu Lys Glu Arg Phe Glu Glu Glu Ala
180 185 190
Arg Leu Arg Asp Asp Thr Glu Ala Ala Ile Arg Ala Leu Arg Lys Asp
195 200 205
Ile Glu Glu Ser Ser Met Val Lys Val Glu Leu Asp Lys Lys Val Gln 210 220
Ser Leu Gln Asp Glu Val Ala Phe Leu Arg Arg Asn His Glu Glu 225 230 235 240
```

Val Ala Asp Leu Leu Ala Gln Ile Gln Ala Ser His Ile Thr Val Glu 250 Arg Lys Asp Tyr Leu Lys Thr Asp Ile Ser Thr Ala Leu Lys Glu Ile 260 265 270 Arg Ser Gln Leu Glu Cys His Ser Asp Gln Asn Met His Gln Ala Glu 280 285 Glu Trp Phe Lys Cys Arg Tyr Ala Lys Leu Thr Glu Ala Ala Glu Gln 290 295 300 Asn Lys Glu Ala Ile Arg Ser Ala Lys Glu Glu Ile Ala Glu Tyr Arg Arg Gln Leu Gln Ser Lys Ser Ile Glu Leu Glu Ser Val Arg Gly Thr 325 330 Lys Glu Ser Leu Glu Arg Gln Leu Ser Asp Ile Glu Glu Arg His Asn 340 345 His Asp Leu Ser Ser Tyr Gln Asp Thr Ile Gln Gln Leu Glu Asn Glu 355 360 Leu Arg Gly Thr Lys Trp Glu Met Ala Arg His Leu Arg Glu Tyr Gln 370 380 380 Asp Leu Leu Asn Val Lys Met Ala Leu Asp Ile Glu Ile Ala Ala Tyr 390 395 Arg Lys Leu Leu Glu Gly Glu Glu Thr Arg Phe Ser Thr Phe Ser Gly 410 405 Ser Ile Thr Gly Pro Leu Tyr Thr His Arg Gln Pro Ser Val Thr Ile 425 430 Ser Ser Lys Ile Gln Lys Thr Lys Val Glu Ala Pro Lys Leu Lys Val Gln His Lys Phe Val Glu Glu Ile Ile Glu Glu Thr Lys Val Glu Asp 455 460 Glu Lys Ser Glu Met Glu Glu Thr Leu Thr Ala Ile Ala Glu Glu Leu 470 Ala Ala Ser Ala Lys Glu Glu Lys Glu Glu Ala Glu Glu Lys Glu Glu 485 490 Glu Pro Glu Ala Glu Lys Ser Pro Val Lys Ser Pro Glu Ala Lys Glu
500 510 Glu Glu Glu Asp Glu Gly Val Lys Ser Asp Gln Ala Glu Glu Gly 530 540 Gly Ser Glu Lys Glu Gly Ser Ser Glu Lys Asp Glu Gly Glu Gln Glu 545 555 560 Glu Glu Glu Gly Glu Thr Glu Ala Glu Gly Glu Glu Glu Ala Glu
565 570 575 Ala Lys Glu Glu Lys Lys Ile Glu Gly Lys Val Glu Glu Val Ala Val
580 585 590 Lys Glu Glu Ile Lys Val Glu Lys Pro Glu Lys Ala Lys Ser Pro Met 595 600 605 Pro Lys Ser Pro Val Glu Glu Val Lys Pro Lys Pro Glu Ala Lys Ala 615 Gly Lys Gly Glu Gln Lys Glu Glu Glu Lys Val Glu Glu Glu Lys Lys 625 630 640 635 Glu Val Thr Lys Glu Ser Pro Lys Glu Glu Lys Val Glu Lys Lys Glu 645 650 Glu Lys Pro Lys Asp Val Ala Asp Lys Lys Lys Ala Glu Ser Pro Val 665 670 660 Lys Glu Lys Ala Val Glu Glu Val Ile Thr Ile Ser Lys Ser Val Lys 680 Val Ser Leu Glu Lys Asp Thr Lys Glu Glu Lys Pro Gln Pro Gln Glu 690 695 700 Lys Val Lys Glu Lys Ala Glu Glu Glu Gly Gly Ser Glu Glu Glu Gly 715 720 Ser Asp Arg Ser Pro Gln Glu Ser Lys Lys Glu Asp Ile Ala Ile Asn 725 730 735 Gly Glu Val Glu Gly Lys Glu Glu Glu Glu Gln Glu Thr Gln Glu Lys 745

```
Gly Ser Gly Arg Glu Glu Glu Lys Gly Val Val Thr Asn Gly Leu Asp
765 760 765
                               760
                                                    765
Val Ser Pro Ala Glu Glu Lys Lys Gly Glu Asp Ser Ser Asp Asp Lys
770 780
Val Val Val Thr Lys Lys Val Glu Lys Ile Thr Ser Glu Gly Gly Asp 785 790 795 800
Gly Ala Thr Lys Tyr Ile Thr Lys Ser Val Thr Val Thr Gln Lys Val
805 810 815
Glu Glu His Glu Glu Thr Phe Glu Glu Lys Leu Val Ser Thr Lys Lys 820 825 830
Val Glu Lys Val Thr Ser His Ala Ile Val Lys Glu Val Thr Gln Gly
835 840 845
Asp
       101
<210>
<211>
        50
<212>
       PRT
      Mus musculus
<213>
<400> 101
Ser Tyr Gln Asp Thr Ile Gln Gln Leu Glu Asn Glu Leu Arg Gly Thr
                                       10
Lys Trp Glu Met Ala Arg His Leu Arg Glu Tyr Gln Asp Leu Leu Asn 20 25 30
Val Lys Met Ala Leu Asp Ile Glu Ile Ala Ala Tyr Arg Arg Leu Leu
                              40
Glu Gly
    50
<210> 102
<211> 55
<212>
       PRT
<213> Mus musculus
<400> 102
His Asp Leu Ser Ser Tyr Gln Asp Thr Ile Gln Gln Leu Glu Asn Glu
Leu Arg Gly Thr Lys Trp Glu Met Ala Arg His Leu Arg Glu Tyr Gln
                                  25
             20
                                                         30
Asp Leu Leu Asn Val Lys Met Ala Leu Asp Ile Glu Ile Ala Ala Tyr
        35
                              40
Arg Lys Leu Leu Glu Gly Glu 50 55
<210>
      103
<211> 53
<212>
       PRT
<213>
       Mus musculus
<400> 103
Leu Ser Ser Tyr Gln Asp Thr Ile Gln Gln Leu Glu Asn Glu Leu Arg
Gly Thr Lys Trp Glu Met Ala Arg His Leu Arg Glu Tyr Gln Asp Leu
Leu Asn Val Lys Met Ala Leu Asp Ile Glu Ile Ala Ala Tyr Arg Lys
        35
Leu Leu Glu Gly Gly
    50
<210>
       104
<211>
       38
<212>
       PRT
<213>
       Mus musculus
```

<210> 105 <211> 996 <212> PRT <213> Mus musculus

<400> 105 Met Lys Arg Ile Phe Ser Cys Ser Ser Ser Gln Val Ala Val Glu Lys 10 Trp Asn Arg Arg Asp Gln Lys Leu Leu Glu Ala Val Gln Arg Gly Asp 25 Val Gly Arg Val Ala Ala Leu Ala Ser Arg Lys Ser Ala Arg Pro Thr 35 40 45 Lys Leu Asp Ser Asn Gly Gln Ser Pro Phe His Leu Ala Ala Ser Lys 55 60 Gly Leu Thr Glu Cys Leu Thr Ile Leu Leu Ala Asn Gly Ala Asp Ile 65 70 75 80 Asn Ser Lys Asn Glu Asp Gly Ser Thr Ala Leu His Leu Ala Thr Ile 85 90 95 Ser Cys Gln Pro Gln Cys Val Lys Val Leu Leu Gln His Gly Ala Asn 100 105 110 Glu Asp Ala Val Asp Ala Glu Asn Arg Ser Pro Leu His Trp Ala Ala 115 120 125 Ser Ser Gly Cys Ala Ser Ser Val Leu Leu Cys Asp His Glu Ala 130 140 Ser Leu Gly Gly His Ala Ala Ile Cys Ser Gln Leu Leu Gln Arg Gly
165 170 175 Ala Arg Val Asn Val Thr Asp Lys Asp Asp Lys Ser Ala Leu Ile Leu 180 185 Ala Cys Glu Lys Gly Ser Ala Glu Val Ala Glu Leu Leu Leu Ser His 195 200 205 Gly Ala Asp Ala Gly Ala Val Asp Ser Leu Gly His Asn Ala Leu His 210 220 Tyr Ala Leu Arg Thr Gln Asp Lys Glu Leu Trp Arg Leu Leu Gln Gln 225 230 235 240 Ala Leu Asn Arg Arg Arg Gly Gly His Gly Leu Val Gln His Pro 245 250 255 250 Asp His Pro Ser Gln Ala Ser Ser Cys Glu Pro Arg Val Gly Ser Pro 260 265 270 Pro Lys Asn Ser Arg Lys Val Glu Pro Glu Glu Glu Glu Glu Glu Glu 280 285 Gly Glu Glu Arg Cys Ser Glu Glu Trp Arg Trp Lys Phe Glu Glu Glu 295 300 Gln Arg Lys Val His Gln Leu Glu Gln Glu Leu Val Arg Lys Thr Asp 310 315 320 Glu Cys Lys Ala His Ala Ala Ala Phe Ser Ser Leu Glu Glu Gln Ile 325 330 Arg Glu Gln Ala Gln Glu Leu Gly His Leu Leu Val Gln Glu Pro Gly 340 345 350 Ala Pro Gly Asn Gln Gly Pro Gly Leu Arg Pro Glu Gly Asp Gly Met Glu Glu Gly Cys Pro Leu Asn Leu Leu Ala Glu Arg Ile Gln Glu Leu 370 _ 375 380 Lys Lys Gln Gln Lys Ala Leu Ala Thr Ile Asn Pro Thr Leu Val Pro

390 Lys Arg Ala Glu Glu Leu Ala Pro Ala Glu Ile His His Glu Val His 405 410 Arg Lys Ser Gln Pro Glu Gln Gly Leu Pro Gln Gly Pro Ser Ser Glu 425 430 420 Thr Thr Gly Lys Ala Thr Gly Gln Gln Pro Asn Thr Asn Gly Gly Gln 440 445 Asn Leu Gly Leu Gln Asn Thr Glu Gln Val Cys Ala Gly Gln Lys Glu 450 455 460 Arg Thr Pro Ala Pro Gly Thr Glu Thr Ala Gly Thr Val Gly Glu Pro 470 475 Val Gly Ile Ala Met Asn Gln Leu Leu Leu Gln Leu Arg Glu Glu Leu Ala Ala Val Trp Arg Glu Lys Asp Ala Ala Arg Gly Ala Leu Ser Arg 500 505 Pro Val Leu Glu Gly Ala Leu Gly Thr Pro Arg Ala Glu Ala Ala Ala 520 515 Ala Ala Trp Glu Lys Met Glu Ala Arg Leu Glu Arg Val Leu Val Arg **540** 535 Leu Asp Gly Ala Lys Met Gly Leu His Val Lys Pro Glu Val Pro Val 550 Gln Gly Ser Arg Asp Gly Ala Pro Lys Ala Val Pro Gly Cys Ser Lys 565 570 575 Glu Glu Glu Lys Lys Ala Leu Gly Thr Arg Gly Glu Pro Leu Gly 580 585 _ _ 590 Ala Pro Gly Lys Glu Gln Ala Leu Gly Gly Gly Leu Ala Lys Gly Gln
595 600 605 Leu Glu Lys Glu Val Ser Ala Leu Arg Leu Ser Asn Ser Asn Leu Leu 615 620 Glu Glu Leu Gly Glu Leu Gly Arg Glu Arg Gln Arg Leu Gln Gly Glu 630 635 Leu Gln Ser Leu Thr Gln Arg Leu His Arg Glu Phe Val Pro Lys Pro 645 650 655 Glu Ala Gln Val Gln Leu Gln Gln Leu Arg Arg Ser Val Gly Met Leu 660 670 Thr Glu Glu Leu Ala Met Glu Lys Glu Ala Thr Asp Lys Leu Arg Arg 680 Leu Leu Ala Ser Gln Thr Ser Gly Leu Gln Gly Leu Trp Lys Cys Leu 695 Pro Pro Asp Leu Val Gly Lys Gly Asn Thr Gln Ser Thr Ala Ala Glu 715 710 720 Pro Leu Glu Glu Leu Gln Ala Cys Ile Ser Thr Leu Val Asp Arg His 725 735 735 Leu Glu Ala Gln Arg Val Leu Ala Arg Leu Glu Glu Glu Asn Gln Gln 740 745 _ 750 Leu Arg Gly Ser Leu Ala Pro Cys Gly Glu Pro Glu Ala Ser Leu Lys 755 760 765 Val Thr Ala Ser Pro Gln <u>Val</u> Ala Ala Leu Glu <u>Glu</u> Asp Leu Gly Met 780 Leu Glu Glu Glu Leu Arg Ala Val Gln Ala Thr Met Ser Gly Lys Ser 785 790 795 800 Gin Giu Ile Cys Lys Leu Lys Gin Leu Leu Tyr Gin Ala Thr Glu Giu 805 810 Val Ala Glu Leu Arg Ala Arg Glu Ala Ala Ser Leu Arg Gln His Glu 825 830 Lys Thr Arg Gly Ser Leu Val Ala Gln Ala Gln Ala Trp Gly Gln Glu 840 845 835 Leu Lys Val Val Leu Glu Lys Tyr Asn Thr Ala Cys Arg Glu Met Thr 850 855 860 Arg Leu Arg Asp Thr Val Ala Glu Glu Arg Arg Arg Ser Glu Asp Leu 865 870 875 880 Ala Ala Arg Ala Ala Glu Gln Glu Arg Gln Ala Gly Glu Met Arg Gly 890 Arg Ser Glu Gln Phe Glu Lys Thr Ala Glu Leu Leu Lys Glu Lys Thr

Asn His Leu Ile Gly Ala Cys Arg Asp Lys Glu Ala Lys Ile Lys Glu **920** Leu Leu Lys Lys Leu Glu Gln Leu Ser Glu Glu Val Leu Glu Val Arg 930 935 940 Gly Glu Asn Ala His Leu Ala Leu Gln Leu Gln Asp Ser Gln Lys Asn 950 955 His Glu Glu Ile Ile Ser Thr Tyr Arg Ser His Leu Leu Asn Ala Ala 965 970 975 Arg Gly Tyr Met Glu Gln Asp Val Tyr Asn Ile Leu Leu Arg Ile Leu 980 985 Ser Met Gln Glu 995 106 <210> 68 <211> <212> PRT <213> Mus musculus <400> 106 Gly Leu Ala Lys Gly Gln Leu Glu Lys Glu Val Ser Ala Leu Arg Leu 10 Ser Asn Ser Asn Leu Leu Glu Glu Leu Gly Glu Leu Gly Arg Glu Arg
20 25 30 Gln Arg Leu Gln Gly Glu Leu Gln Ser Leu Thr Gln Arg Leu His Arg 35 40 45 Glu Phe Val Pro Lys Pro Glu Ala Gln Val Gln Leu Gln Gln Leu Arg Arg Ser Val Arg <210> 107 68 <211> <212> PRT <213> Mus musculus <400> 107 Gly Leu Ala Lys Gly Gln Leu Glu Lys Glu Val Ser Ala Leu Arg Leu 10 Ser Asn Ser Asn Leu Leu Glu Glu Leu Gly Glu Leu Gly Arg Glu Arg 20 25 30 Gln Arg Leu Gln Gly Glu Leu Gln Ser Leu Thr Gln Arg Leu His Arg
35 40 45 Glu Phe Val Pro Lys Pro Glu Ala Gln Val Gln Leu Gln Gln Leu Arg Arg Ser Met Arg 65 <210> 108 <211> 68 <212> PRT <213> Mus musculus <400> 108 Gly Leu Ala Lys Gly Gln Leu Glu Lys Glu Val Ser Ala Leu Gly Leu 10 Ser Asn Ser Asn Leu Leu Glu Glu Leu Gly Glu Leu Gly Arg Glu Arg 20 25 30 Gln Arg Leu Gln Gly Glu Leu Gln Ser Leu Thr Gln Arg Leu His Arg 40 Glu Phe Val Pro Lys Pro Glu Ala Gln Val Leu Leu Gln Gln Leu Arg 50

36

Arg Ser Val Met

<210> 109 <211> 450 <212> PRT <213> Mus musculus

<400> Met Met Asp Val Ser Arg Thr Gln Thr Ala Val Ser Ile Val Glu Glu 10 Asp Leu Lys Leu Leu Gln Leu Lys Leu Arg Ala Ser Met Ser Thr Lys 25 Cys Asn Leu Glu Asp Gln Ile Lys Lys Leu Glu Asp Asp Arg Ser Ser Leu Gln Thr Ala Lys Ala Gly Leu Glu Asp Glu Cys Lys Thr Leu Arg 50 60 Gln Lys Val Glu Ile Leu Asn Glu Leu Tyr Gln Gln Lys Glu Met Ala 65 _ 70 _ _ 75 _ 80 Leu Gln Lys Lys Leu Ser Gln Glu Glu Tyr Glu Arg Gln Asp Arg Glu 85 90 95 Gln Arg Leu Thr Ala Ala Asp Glu Lys Val Val Leu Ala Ala Glu Glu 100 105 110 Val Lys Thr Tyr Lys Arg Arg Ile Glu Glu Met Glu Glu Glu Leu Gln
115 120 125 Lys Thr Glu Arg Ser Phe Lys Asn Gln Ile Ala Ala His Glu Lys Lys 130 135 140 Ala His Asp Asn Trp Leu Lys Ala Arg Ala Ala Glu Arg Ala Met Ala 150 155 Glu Glu Lys Arg Glu Ala Ala Asn Leu Arg His Lys Leu Leu Glu Met Thr Gln Lys Met Ala Met Arg Gln Asp Glu Pro Val Ile Val Lys Pro 185 180 Met Pro Gly Arg Pro Asn Thr Gln Asn Pro Pro Arg Arg Gly Leu Leu 195 200 205 Ser Gln Asn Gly Ser Phe Gly Pro Ser Pro Val Ser Gly Gly Glu Cys 210 _ 215 _ 220 Ser Pro Pro Leu Pro Ala Glu Pro Pro Gly Arg Pro Leu Ser Ala Thr 225 230 235 240 Leu Ser Arg Arg Asp Thr Pro Arg Ser Glu Phe Gly Ser Leu Asp Arg 245 250 255 His Leu Pro Arg Pro Arg Trp Pro Ser Glu Ala Ser Gly Lys His Ser 260 265 270 Ala Ser Asp Pro Gly Pro Ala Pro Val Val Asn Ser Ser Ser Arg Ser 275 _____ 280 ____ 285 Ser Pro Ala Lys Ala Val Asp Glu Gly Lys Val Asn Met Ala Pro 290 295 300 Lys Gly Pro Pro Pro Phe Pro Gly Val Pro Leu Met Gly Gly Pro Val 310 315 Pro Pro Pro Ile Arg Tyr Gly Pro Pro Pro Gln Leu Cys Gly Gly Pro 330 325 335 Phe Gly Pro Arg Pro Leu Pro Pro Pro Phe Val Pro Gly Met His Pro 345 350 Pro Leu Gly Val Arg Glu Tyr Ala Pro Gly Val Leu Pro Gly Lys Arg 355 360 365 Asp Leu Pro Leu Asp Pro Arg Glu Phe Leu Pro Gly His Thr Pro Phe 375 Arg Pro Pro Gly Ser Leu Gly Pro Arg Glu Phe Phe Ile Pro Gly Thr Arg Leu Pro Pro Pro Thr His Gly Pro Gln Glu Tyr Pro Pro Pro 405 410 415 Pro Ala Val Arg Asp Ser Leu Pro Ser Gly Pro Arg Glu Glu Ala Lys 430 42Ō 425 Pro Ala Ser Pro Ser Ser Val Gln Asp Arg Ser Gln Ala Ser Lys Pro 440

```
Thr Pro
    450
<210> 110
<211> 58
<212>
       PRT
<213>
      Mus musculus
<400> 110
Leu Gln Leu Lys Leu Arg Ala Ser Met Ser Thr Lys Cys Asn Leu
1 5 10 15
Glu Asn Gln Ile Lys Lys Leu Glu Asp Asp Arg Ser Ser Leu Gln Thr
20 25 30
Ala Lys Ala Gly Leu Glu Asp Glu Cys Lys Thr Leu Arg Gln Lys Val
Glu Ile Leu Asn Glu Leu Tyr Leu Gln Thr
50 55
<210> 111
<211>
      44
<212>
       PRT
<213> Mus musculus
<400>
Leu Glu Asp Gln Ile Lys Lys Leu Glu Asp Asp Arg Ser Ser Leu Gln 1 10 15
Thr Ala Lys Ala Gly Leu Glu Asp Glu Cys Lys Thr Leu Arg Gln Lys
20 25 30
Val Glu Ile Leu Asn Glu Leu Tyr Gln Gln Ser Arg
       112
225
<210>
<211>
<212>
       PRT
<213> Mus musculus
<400> 112
His Leu Arg Lys Val Lys Phe Gln Ala Lys Leu Glu His Glu Tyr Ile
1 5 10 15
His Asn Phe Lys Val Leu Gln Ala Ala Phe Lys Lys Met Gly Val Asp
20 25 30
Lys Ile Ile Pro Val Glu Lys Leu Val Lys Gly Lys Phe Gln Asp Asn 35 40 45
Phe Glu Phe Ile Gln Trp Phe Lys Lys Phe Phe Asp Ala Asn Tyr Asp 50 55 60
Gly Lys Asp Tyr Asn Pro Leu Leu Ala Arg Gln Gly Gln Asp Val Ala
                     70
Pro Pro Pro Asn Pro Gly Asp Gln Ile Phe Asn Lys Ser Lys Leu
                 85
                                       90
Ile Gly Thr Ala Val Pro Gln Arg Thr Ser Pro Thr Gly Pro Lys Asn
Met Gln Thr Ser Gly Arg Leu Ser Asn Val Ala Pro Pro Cys Ile Leu
                              120
Arg Lys Asn Pro Pro Ser Ala Arg Asn Gly Gly His Glu Ala Asp Ala
                          135
Gln Ile Leu Glu Leu Asn Gln Gln Leu Leu Asp Leu Lys Leu Thr Val
145 150 155 160
Asp Gly Leu Glu Lys Glu Arg Asp Phe Tyr Phe Ser Lys Leu Arg Asp 165 170 175
Ile Glu Leu Ile Cys Gln Glu His Glu Ser Glu Asn Ser Pro Val Ile
180 185 190
Ser Gly Ile Ile Gly Ile Leu Tyr Ala Thr Glu Glu Gly Phe Ala Pro
195 200 205
Pro Glu Asp Asp Glu Ile Glu Glu His Gln Gln Glu Asp Gln Asp Glu
```

210 215 220 225 <210> 113 <211> 86 <212> PRT

<400> 113 Arg Asn Gly Gly His Glu Ala Asp Ala Gln Ile Leu Glu Leu Asn Gln Gln Leu Leu Asp Leu Lys Leu Thr Val Asp Gly Leu Glu Arg Glu Arg 25 20 Asp Phe Tyr Phe Ser Lys Leu Arg Asp Ile Glu Leu Ile Cys Gln Glu 35 40 45 His Glu Ser Glu Asn Ser Pro Val Ile Ser Gly Ile Ile Gly Ile Leu 55 60 Tyr Ala Thr Glu Glu Gly Phe Ala Pro Pro Glu Asp Asp Glu Ile Glu 65 70 75 80 Glu His Gln Gln Glu Glu

<210> 114 485 <211> <212> PRT

<213>

<213> Mus musculus

Mus musculus

<400> 114 Met Asn Asn Phe Glu Cys Glu Pro Ala Phe Tyr Thr Cys Val Glu Val 10 Thr Ala Gly Asn Arg Leu Phe Tyr His Ile Val Asp Ser Asp Glu Val 30 Ser Thr Lys Ile Leu Met Glu Phe Asn Lys Met Asn Leu Pro Gly Glu 35 40 45 Val Thr Phe Leu Pro Leu Asn Lys Leu Asp Val Arg Asp Thr Ala Tyr 55 Pro Glu Thr Asn Asp Ala Ile Pro Met Ile Ser Lys Leu Arg Tyr Asn 65 70 75 80 Pro Arg Phe Asp Lys Ala Phe Lys His Val Phe Gly Lys Thr Leu Ile 85 90 95 Cys Arg Ser Met Glu Val Ser Thr Gln Leu Ala Arg Ala Phe Thr Met 100 105 110 Asp Cys Ile Thr Leu Glu Gly Asp Gln Val Ser His Arg Gly Ala Leu 115 120 125 Thr Gly Gly Tyr Tyr Asp Thr Arg Lys Ser Arg Leu Glu Leu Gln Lys 135 140 Asp Val Arg Lys Ala Glu Glu Glu Leu Gly Glu Leu Glu Ala Lys Leu 155 150 Asn Glu Asn Leu Arg Arg Asn Ile Glu Arg Ile Asn Asn Glu Ile Asp 165 170 175 Gln Leu Met Asn Gln Met Gln Gln Ile Glu Thr Gln Gln Arg Lys Phe 185 180 Lys Ala Ser Arg Asp Ser Ile Leu Ser Glu Met Lys Met Leu Lys Glu 195 200 205 Lys Arg Gln Gln Ser Glu Lys Thr Phe Met Pro Lys Gln Arg Ser Leu 210 220 Gln Ser Leu Glu Ala Ser Leu His Ala Met Glu Ser Thr Arg Glu Ser 235 240 Leu Lys Ala Glu Leu Gly Thr Asp Leu Leu Ser Gln Leu Ser Leu Glu 245 250 255 Asp Gln Lys Arg Val Asp Ala Leu Asn Asp Glu Ile Arg Gln Leu Gln 265 Gln Glu Asn Arg Gln Leu Leu Asn Glu Arg Ile Lys Leu Glu Gly Ile

```
280
Ile Thr Arg Val Glu Thr Tyr Leu Asn Glu Asn Leu Arg Lys Arg Leu
    290
                         295
                                              300
Asp Gln Val Glu Gln Glu Leu Asn Glu Leu Arg Glu Thr Glu Gly Gly 315 320
Thr Val Leu Thr Ala Thr Thr Ser Glu Leu Glu Ala Ile Asn Lys Arg 325 335
Val Lys Asp Thr Met Ala Arg Ser Glu Asp Leu Asp Asn Ser Ile Asp 340 350
Lys Thr Glu Ala Gly Ile Lys Glu Leu Gln Lys Ser Met Glu Arg Trp
        355
                             360
                                                  365
Lys Asn Met Glu Lys Glu His Met Asp Ala Ile Asn His Asp Thr Lys
    370
                                              380
                         375
Glu Leu Glu Lys Met Thr Asn Arg Gln Gly Met Leu Leu Lys Lys Lys
                     390
                                          395
Glu Glu Cys Met Lys Lys Ile Arg Glu Leu Gly Ser Leu Pro Gln Glu
                405
                                      410
Ala Phe Glu Lys Tyr Gln Thr Leu Ser Leu Lys Gln Leu Phe Arg Lys
420
430
Leu Glu Gln Cys Asn Thr Glu Leu Lys Lys Tyr Ser His Val Asn Lys
        435
                             440
Lys Ala Leu Asp Gln Phe Val Asn Phe Ser Glu Gln Lys Glu Arg Leu
   450
                        455
                                              460
Ile Lys Arg Gln Glu Leu Asp Arg Gly Tyr Lys Ser Ile Met Glu
                                          475
                     470
Leu Met Lys Cys Thr
                485
<210>
      115
<211> 73
<212> PRT
<213> Mus musculus
<400> 115
Gln Lys Arg Val Asp Ala Leu Asn Asp Glu Ile Arg Gln Leu Gln Gln
                                      10
Glu Asn Arg Gln Leu Leu Asn Glu Arg Ile Lys Leu Glu Gly Ile Ile
            20
Thr Arg Val Glu Thr Tyr Leu Asn Glu Asn Leu Arg Lys Arg Leu Asp 35 40 45
Gln Val Glu Gln Glu Leu Asn Glu Leu Arg Glu Thr Glu Gly Gly Thr 50 60
Val Leu Thr Ala Thr Thr Ser Glu Lys
                     70
65
<210>
      116
<211>
       1337
<212>
      PRT
<213>
      Mus musculus
<400> 116
Met Met Glu Ile Gln Met Asp Glu Gly Gly Val Val Val Tyr Gln
                                      10
           Cys Ser Gly Ser Val Met Ser Glu Arg Val Ser Gly Leu 20 25 30
Ala Gly Ser Ile Tyr Arg Glu Phe Glu Arg Leu Ile His Cys Tyr Asp
                             40
                                                  45
Glu Glu Val Val Lys Glu Leu Met Pro Leu Val Val Asn Val Leu Glu 50 55 60
Asn Leu Asp Ser Val Leu Ser Glu Asn Gln Glu His Glu Val Glu Leu 65 70 75 80
```

Glu Leu Leu Arg Glu Asp Asn Glu Gln Leu Leu Thr Gln Tyr Glu Arg 85 90 95 Glu Lys Ala Leu Arg Lys Gln Ala Glu Glu Lys Phe Ile Glu Phe Glu

Asp Ala Leu Glu Gln Glu Lys Lys Glu Leu Gln Ile Gln Val Glu His 115 120 125 Tyr Glu Phe Gln Thr Arg Gln Leu Glu Leu Lys Ala Lys Asn Tyr Ala 130 135 140 Asp Gln Ile Ser Arg Leu Glu Glu Arg Glu Ser Glu Met Lys Lys Glu 145 150 155 160 Tyr Asn Ala Leu His Gln Arg His Thr Glu Met Ile Gln Thr Tyr Val Glu His Ile Glu Arg Ser Lys Met Gln Gln Val Gly Gly Ser Gly Gln 185 Thr Glu Ser Ser Leu Pro Gly Arg Ser Arg Lys Glu Arg Pro Thr Ser 195 200 205 Leu Asn Val Phe Pro Leu Ala Asp Gly Met Val Arg Ala Gln Met Gly 210 215 Gly Lys Leu Val Pro Ala Gly Asp His Trp His Leu Ser Asp Leu Gly 225 230 235 240 Gln Leu Gln Ser Ser Ser Tyr Gln Cys Pro Asn Asp Glu Met Ser 245 250 255 Glu Ser Gly Gln Ser Ser Ala Ala Ala Thr Pro Ser Thr Thr Gly Thr 260 265 270 Lys Ser Asn Thr Pro Thr Ser Ser Val Pro Ser Ala Ala Val Thr Pro 275 280 285 Leu Asn Glu Ser Leu Gln Pro Leu Gly Asp Tyr Val Ser Val Thr Lys 290 295 300 Asn Asn Lys Gln Ala Arg Glu Lys Arg Asn Ser Arg Asn Met Glu Val 305 310 315 320 Gln Val Thr Gln Glu Met Arg Asn Val Ser Ile Gly Met Gly Ser Ser 325 ___ 330 335 Asp Glu Trp Ser Asp Val Gln Asp Ile Ile Asp Ser Thr Pro Glu Leu 340 345 350 Asp Val Cys Pro Glu Thr Arg Leu Glu Arg Thr Gly Ser Ser Pro Thr Gln Gly Ile Val Asn Lys Ala Leu Gly Ile Asn Thr Asp Ser Leu Tyr 375 370 380 His Glu Leu Ser Thr Ala Gly Ser Glu Val Ile Gly Asp Val Asp Glu 385 390 395 400 Gly Ala Asp Leu Leu Gly Glu Phe Ser Val Arg Asp Asp Phe Phe Gly 410 405 Met Gly Lys Glu Val Gly Asn Leu Leu Leu Glu Asn Ser Gln Leu Leu 425 420 430 Glu Thr Lys Asn Ala Leu Asn Val Val Lys Asn Asp Leu Ile Ala Lys
435
440
445 Val Asp Gln Leu Ser Gly Glu Gln Glu Val Leu Lys Gly Glu Leu Glu 450 460 455 Ala Ala Lys Gln Ala Lys Val Lys Leu Glu Asn Arg Ile Lys Glu Leu 470 475 Glu Glu Leu Lys Arg Val Lys Ser Glu Ala Val Thr Ala Arg Arg 485 490 Glu Pro Arg Glu Glu Val Glu Asp Val Ser Ser Tyr Leu Cys Thr Glu 500 505 Leu Asp Lys Ile Pro Met Ala Gln Arg Arg Arg Phe Thr Arg Val Glu 525 515 520 Met Ala Arg Val Leu Met Glu Arg Asn Gln Tyr Lys Glu Arg Leu Met 535 540 Glu Leu Gln Glu Ala Val Arg Trp Thr Glu Met Ile Arg Ala Ser Arg 555 550 560 Glu His Pro Ser Val Gln Glu Lys Lys Lys Ser Thr Ile Trp Gln Phe 565 570 575 Phe Ser Arg Leu Phe Ser Ser Ser Ser Pro Pro Pro Ala Lys Arg 580 585 590 Ser Tyr Pro Ser Val Asn Ile His Tyr Lys Ser Pro Thr Ala Ala Gly
595 600 605 Phe Ser Gln Arg Arg Ser His Ala Leu Cys Gln Ile Ser Ala Gly Ser

Arg Pro Leu Glu Phe Phe Pro Asp Asp Cys Thr Ser Ser Ala Arg 625 630 635 640 Arg Glu Gln Lys Arg Glu Gln Tyr Arg Gln Val Arg Glu His Val Arg 645 655 Asn Asp Asp Gly Arg Leu Gln Ala Cys Gly Trp Ser Leu Pro Ala Lys
660 665 670 Tyr Lys Gln Leu Ser Pro Asn Gly Gly Gln Glu Asp Thr Arg Met Lys 675 680 685 Asn Val Pro Val Pro Val Tyr Cys Arg Pro Leu Val Glu Lys Asp Pro 695 700 Ser Thr Lys Leu Trp Cys Ala Ala Gly Val Asn Leu Ser Gly Trp Lys 705 710 720 715 Pro His Glu Glu Asp Ser Ser Asn Gly Pro Lys Pro Val Pro Gly Arg 725 730 Asp Pro Leu Thr Cys Asp Arg Glu Gly Glu Gly Glu Pro Lys Ser Thr 740 745 750 His Pro Ser Pro Glu Lys Lys Lys Ala Lys Glu Thr Pro Glu Ala Asp 755 760 Ala Thr Ser Ser Arg Val Trp Ile Leu Thr Ser Thr Leu Thr Thr Ser 775 Lys Val Val Ile Ile Asp Ala Asn Gln Pro Gly Thr Ile Val Asp Gln 785 790 795 800 Phe Thr Val Cys Asn Ala His Val Leu Cys Ile Ser Ser Ile Pro Ala 805 810 815 Ala Ser Asp Ser Asp Tyr Pro Pro Gly Glu Met Phe Leu Asp Ser Asp 820 825 830 Val Asn Pro Glu Asp Ser Gly Ala Asp Gly Val Leu Ala Gly Ile Thr 835 840 845 Ser Arg Gly Asp Thr Pro Val Leu Asp Lys Gly Gln Gly Asp Val Ala 865 870 875 880 Thr Thr Ala Asn Gly Lys Val Asn Pro Ser Gln Ser Thr Glu Glu Ala 885 890 895 Thr Glu Ala Thr Glu Val Pro Asp Pro Gly Pro Ser Glu Ser Glu Ala 905 900 910 Thr Thr Val Arg Pro Gly Pro Leu Thr Glu His Val Phe Thr Asp Pro 915 920 Ala Pro Thr Pro Ser Ser Ser Thr Gln Pro Ala Ser Glu Asn Gly Ser 930 935 940 Glu Ser Asn Gly Thr Ile Val Gln Pro Gln Val Glu Pro Ser Gly Glu 950 955 960 Leu Ser Thr Thr Thr Ser Ser Ala Ala Pro Thr Met Trp Leu Gly Ala 970 975 965 Gln Asn Gly Trp Leu Tyr Val His Ser Ala Val Ala Asn Trp Lys Lys 980 985 Cys Leu His Ser Ile Lys Leu Lys Asp Ser Val Leu Ser Leu Val His 1000 995 1005 Val Lys Gly Arg Val Leu Val Ala Leu Ala Asp Gly Thr Leu Ala 1010 1015 1020 Ile Phe_ His Arg Gly Glu Asp_ Gly Gln Trp Asp Leu_ Ser Asn Tyr 1035 1030 1025 His Leu Met Asp Leu Gly His Pro His His Ser Ile Arg Cys Met 1040 1045 1050 Ala Val Val Asn Asp Arg Val Trp Cys Gly Tyr Lys Asn Lys Val 1065 1055 1060 His Val Ile Gln Pro Lys Thr Met Gln Ile Glu Lys Ser Phe Asp 1075 1070 1080 Ala His Pro Arg Arg Glu Ser Gln Val Arg Gln Leu Ala Trp Ile 1085 1090 1095 Gly Val Trp Val Ser Ile Arg Leu Asp Ser Thr Leu Arg Gly Asp 1100 1105 1110 Leu Tyr His Ala His Thr His Gln His Leu Gln Asp Val Asp Ile

```
1115
                         1120
                                               1125
Glu Pro Tyr Val Ser Lys Met
                              Leu Gly Thr Gly Lys Leu Gly Phe
    1130
                         1135
                                               1140
                              Leu Leu Ile Ala Gly Asn Arg Leu
1155
Ser Phe Val Arg Ile Thr Ala
    1145
                         1150
Trp Val Gly Thr Gly Asn Gly
                              Val Val Ile Ser Ile Pro Leu Thr
    1160
                         1165
                                               1170
   Thr
        Val Val Leu His Arg
                              Gly Gln Leu Leu Gly Leu Arg Ala
                                               1185
    1175
                         1180
Asn Lys
        Thr Ser Pro Thr Ser Gly Glu Gly Thr Arg Pro Gly Gly
    1190
                         1195
                                               1200
Ile Ile His Val Tyr Gly Asp Asp Ser Ser Asp Lys Ala Ala Ser
    1205
                         1210
                                               1215
Ser Phe Ile Pro Tyr Cys Ser Met Ala Gln Ala Gln Leu Cys Phe
    1220
                         1225
                                               1230
                              Lys Phe Phe Val Ser Val Pro Gly
        His Arg Asp Ala Val
His Gly
    1235
                                               1245
                         1240
Asn Val Leu Ala Thr Leu Asn Gly Ser Val Leu Asp
                                                    Ser Pro Ser
    1250
                         1255
                                               1260
Glu Gly
        Pro Gly Pro Ala Ala
                              Pro Ala Ala Asp Ala
                                                    Glu Gly Gln
                         1270
    1265
                                               1275
Lys Leu
        Lys Asn Ala Leu Val
                              Leu Ser Gly Gly Glu
                                                    Gly Tyr Ile
    1280
                         1285
                                               1290
Asp Phe Arg Ile Gly Asp Gly
                              Glu Asp Asp Glu Thr Glu Glu Cys
                         1300
                                               1305
    1295
Ala Gly  Asp Val Asn Gln Thr  Lys Pro Ser Leu Ser  Lys Ala Glu
    1310
                         1315
                                               1320
Arg Ser His Ile Ile Val Trp Gln Val Ser Tyr Thr Pro Glu
    1325
                         1330
                                               1335
<210>
       117
<211>
       71
<212>
       PRT
<213>
      Mus musculus
<400> 117
Glu Thr Lys Asn Ala Leu Asn Val Val Lys Asn Asp Leu Ile Ala Lys
Val Asp Gln Leu Ser Gly Glu Gln Glu Val Leu Lys Gly Glu Leu Glu
                                25
                                                     30
Ala Ala Lys Gln Ala Lys Val Lys Leu Glu Asn Arg Ile Lys Glu Leu 35 40 45
Glu Lys Glu Leu Lys Arg Val Lys Ser Glu Ala Val Thr Ala Arg Arg 50 55 60
Glu Pro Arg Glu Glu Val Asp
<210>
       118
<211>
       993
<212>
       PRT
<213>
      Mus musculus
<400>
Met Glu Ala Ala Val Cys Ser Glu Ile Glu Arg Glu Asp Gly Asp Ser
Ser Cys Gly Asp Val Cys Phe Met Asp Lys Gly Leu His Ser Ile Ser
20 25 30
Glu Leu Ser Leu Asp Ser Ser Ile His Ala Ile Asn Leu His Cys Asn 40 45
        35
                            40
Asn Ile Ser Lys Ile Ser Ser Ile Asp His Ile Trp Asn Leu Arg His 50 60
Leu Asp Leu Ser Ser Asn Gln Ile Ser Gln Ile Glu Gly Leu Asn Thr
                    70
                                         75
                                          43
```

Leu Thr Lys Leu Cys Thr Leu Asn Leu Ser Cys Asn Leu Ile Thr Arg 90 Val Glu Gly Leu Glu Ala Leu Val Asn Leu Thr Lys Leu Asn Leu Ser 100 105 Tyr Asn His Ile Asn Asp Leu Ser Gly Leu Met Pro Leu His Gly Leu 115 120 125 Lys Tyr Lys Leu Arg Tyr Ile Asp Leu His Ser Asn Tyr Ile Asp Ser 130 140 Ile His His Leu Leu Gln Cys Thr Val Gly Leu His Phe Leu Thr Asn 145 150 155 160 Leu Ile Leu Glu Lys Asp Gly Glu Gly Asn Pro Ile Cys Leu Ile Pro 165 170 Gly Tyr Arg Ala Ile Ile Leu Gln Thr Leu Pro Gln Leu Arg Ile Leu 180 185 Asp Cys Lys Asn Ile Phe Gly Glu Pro Val Ser Leu Glu Glu Ile Asn 195 200 205 Ser Ser His Leu Gln Cys Leu Glu Gly Leu Leu Asp Asn Leu Val Ser 210 220 220 Ser Asp Ser Pro Leu Asn Ile Ser Glu Asp Glu Val Asn Asp Asp Val 230 235 Ser Ala Pro Pro Met Asp Val Leu Pro Ser Leu Lys Glu Phe Lys Ser 245 250 255 Thr Pro Glu Asp Asn Val Leu Ala Ser Leu Leu Ser Val Cys Pro Ser 260 265 270 Ser Glu Pro Glu Lys Ile Asn Gln Glu Asn Asp Phe Gln Asn Glu Val 275 280 _ 285 Lys Leu Gln Lys Leu Asp Asp Gln Ile Leu Gln Leu Leu Asn Glu Thr 295 290 300 Asn Asn Ser Leu Ile Asp Asn Val Pro Glu Lys Asp Leu Arg Pro Lys 305 310 315 320 Arg Asp Thr Asp Ile Thr Ser Glu Ser Asp Tyr Gly Asn Arg Arg Glu 335 325 330 Cys Ser Arg Lys Val Pro Arg Arg Thr Lys Ile Pro Tyr Tyr Ser Arg 340 345 _ 350 _ _ Thr Ile Gln Thr Ile Lys His His Asn Lys Asn Asn Gly Ala Phe Val 355 360 365 Ser Cys Asn Arg Lys Met Arg Gln Pro Tyr Leu Arg Asp Leu Tyr Val 370 375 380 Arg Ser Ser Leu Val Asn Cys Asn Asn Leu Arg Asp Leu Asp Glu Gln 385 390 395 400 Lys Thr Gly Val Ile Lys Val Asp Lys Asn Phe Ser Asp Asn Ser Thr 405 410 415 Tyr Arg Ser Leu Val Glu Gln Leu Asp Gln Glu Arg Glu Met Arg Trp
420 430 430 430 Lys Ala Glu Gln Thr Glu Lys Lys Leu Met Asp Tyr Ile Asp Glu Leu 435 440 445 His Lys Gln Ala Asp Glu Lys Lys Asp Val His Ser Gln Ala Leu Ile 450 455 460 Thr Thr Asp Arg Leu Lys Asp Ala Ile Phe Lys Glu Arg His Cys Lys 465 470 475 Ala Gln Leu Glu Ile Ile Val His Arg Leu Gln Asn Glu Val Lys Lys 495 485 490 Leu Thr Ile Glu Leu Met Lys Ala Arg Asp Gln Gln Glu Asp His Ile 500 505 510 Arg His Leu Arg Thr Leu Glu Arg Ala Leu Glu Lys Met Glu Lys Gln 515 520 525 Lys Ala Gln Gln Gln Ala Ala Gln Ile Arg Leu Ile Gln Glu Val Glu 540 530 535 Leu Lys Ala Ser Ala Ala Asp Arg Glu Ile Asn Leu Leu Arg Thr Ser 555 550 560 Leu His Gln Glu Lys Gln Gln Val Gln Gln Leu His Glu Leu Leu Ala
565
570 Leu Lys Glu Gln Glu His Arg Gln Glu Ile Glu Thr Arg Gln Phe Phe 580 585 590

Thr Asp Ala Glu Phe Gln Asp Ala Leu Thr Lys Arg Leu Cys Lys Glu 600 605 Glu Arg Lys His Glu Gln Glu Val Lys Glu Tyr Gln Glu Lys Ile Asp 610 615 620 Ile Leu Asn Gln Gln Tyr Leu Asp Leu Glu Asn Glu Phe Arg Ile Ala 630 635 Leu Thr Val Glu Ala Arg Arg Phe Lys Asp Val Gln Asp Gly Phe Glu 645 650 Asp Val Ala Thr Glu Leu Ala Lys Ser Lys His Ala Leu Ile Trp Ala 665 660 670 Gln Arg Lys Glu Asn Glu Ser Ser Ser Leu Ile Lys Asp Leu Thr Cys 675 680 685 Met Val Lys Glu Gln Lys Thr Lys Leu Ser Glu Val Cys Lys Leu Lys 690 695 700 Gln Glu Ala Ala Asn Leu Gln Asn Gln Ile Asn Thr Leu Glu Ile 710 715 Leu Ile Glu Asp Asp Lys Gln Lys Ser Ile Gln Ile Glu Leu Leu Lys 730 725 735 His Glu Lys Thr Gln Leu Ile Ser Glu Leu Ala Ala Lys Glu Ser Leu 745 Ile Tyr Gly Leu Arg Thr Glu Arg Lys Val Trp Gly Gln Glu Leu Ala 76Ō Cys Gln Ser Ser Thr Leu Ser Gln Ser Arg Gly Lys Leu Glu Ala Gln 770 775 780 Ile Glu Ser Leu Cys Arg Glu Asn Glu Ser Leu Arg Lys Ser His Glu 785 790 795 800 Ser Asp Cys Asp Ala Leu Arg Ile Lys Cys Lys Ile Ile Glu Asp Gln 805 810 815 Asn Glu Thr Ile Arg Lys Leu Lys Asp Ser Leu Gln Glu Lys Asp Gly 825 Gln Ile Lys Leu Leu Gln Glu Gln Ile Ala Leu Ile Glu Lys Cys Ser 835 840 845 Gln Glu Gln Leu Asn Glu Lys Ser Pro Gln Leu Asp Ser Ile Val Glu 850 855 860 860 Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys Leu Lys Gln Gln Leu 870 875 880 Lys Ala Lys Glu Leu Glu Glu Glu Ile Arg Lys Ala Tyr Ser Thr 890 Leu Asn Lys Lys Trp His Asp Lys Gly Glu Leu Leu Ser His Leu Glu 910 900 905 Met Gln Val Lys Glu Val Lys Glu Lys Phe Glu Asp Lys Glu Arg Lys 925 Leu Lys Ala Glu Arg Asp Lys Ser Leu Glu Leu Gln Lys Asp Ala Met 930 940 Glu Lys Leu Gln Asn Met Asp Asp Ala Phe Arg Arg Gln Val Asp Glu 945 950 955 960 Ile Val Glu Ala Ḥis Gln Ala Glu Ile Met Gln Leu Ala Asn Glu Lys 965 970 975 Gln Lys Tyr Ile Asp Cys Ala Asn Leu Lys Gly Asp Tyr Ala Arg Gly 980 985 Asp

<210> 119 <211> 52 <212> PRT <213> Mus musculus

 Mus musculus

<213>

<400> 120 Leu Gly Thr Met Pro Arg Phe Ser Leu Ser Arg Met Thr Pro Pro Leu 10 Pro Ala Arg Val Asp Phe Ser Leu Ala Gly Ala Leu Asn Ala Gly Phe 20 25 30 Lys Glu Thr Arg Ala Ser Glu Arg Ala Glu Met Met Glu Leu Asn Asp Arg Phe Ala Ser Tyr Ile Glu Lys Val Arg Phe Leu Glu Gln Gln Asn 50 55 60 Lys Ala Leu Ala Ala Glu Leu Asn Gln Leu Arg Ala Lys Glu Pro Thr 65 _ 70 _ 75 _ 80 Lys Leu Ala Asp Val Tyr Gln Ala Glu Leu Arg Glu Leu Arg Leu Arg 85 90 95 Leu Asp Gln Leu Thr Ala Asn Ser Ala Arg Leu Glu Val Glu Arg Asp 100 105 110 Asn Phe Ala Gln Asp Leu Gly Thr Leu Arg Gln Lys Leu Gln Asp Glu 115 120 125 Thr Asn Leu Arg Leu Glu Ala Glu Asn Asn Leu Ala Ala Tyr Arg Gln 135 Glu Ala His Glu Ala Thr Leu Ala Arg Val Asp Leu Glu Arg Lys Val 155 145 150 Glu Ser Leu Glu Glu Glu Ile Gln Phe Leu Arg Lys Ile Tyr Glu Glu Glu Val Arg Asp Leu Arg Glu Gln Leu Ala Gln Gln Gln Val His Val 180 185 Glu Met Asp Val Ala Lys Pro Asp Leu Thr Ala Ala Leu Arg Glu Ile 195 200 205 Arg Thr Gln Tyr Glu Ala Val Ala Thr Ser Asn Met Gln Glu Thr Glu 210 220 _ _ _ Glu Trp Tyr Arg Ser Lys Phe Ala Asp Leu Thr Asp Ala Ala Ser Arg 225 230 235 240 Asn Ala Glu Leu Leu Arg Gln Ala Lys His Glu Ala Asn Asp Tyr Arg 245 250 255 Arg Gln Leu Gln Ala Leu Thr Cys Asp Leu Glu Ser Leu Arg Gly Thr 260 265 270 Asn Glu Ser Leu Glu Arg Gln Met Arg Glu Gln Glu Arg His Ala 275 280 Arg Glu Ser Ala Ser Tyr Gln Glu Ala Leu Ala Arg Leu Glu Glu Glu 295 30Ō Gly Gln Ser Leu Lys Glu Glu Met Ala Arg His Leu Gln Glu Tyr Gln 305 310 315 320 Asp Leu Leu Asn Val Lys Leu Ala Leu Asp Ile Glu Ile Ala Thr Tyr 325 330 335 Arg Lys Leu Leu Glu Gly Glu Glu Asn Arg Ile Thr Ile Pro Val Gln 345 Thr Phe Ser Asn Leu Gln Ile Arg Glu Thr Ser Leu Asp Thr Lys Ser 355 360 365 Val Ser Glu Gly His Leu Lys Arg Asn Ile Val Val Lys Thr Val Glu 370 380 380 Met Arg Asp Gly Glu Val Ile Lys Asp Ser Lys Gln Glu His Lys Asp 385 390 395 400 400

Val Val Met

<211> 45 <212> PRT Mus musculus <400> 121 Leu Ala Arg Leu Glu Glu Glu Gly Arg Ser Leu Lys Glu Glu Met Ala 1 _ 5 _ 10 _ 15 Arg His Leu Gln Glu Tyr Gln Asp Leu Leu Asn Val Lys Leu Ala Leu 20 25 30 Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly 35 40 45 <210> 122 <211> 451 <212> PRT <213> Mus musculus <400> Met Ala Ser Pro Thr Leu Ser Pro Asp Ser Ser Ser Gln Glu Ala Leu Ser Ala Pro Thr Cys Ser Pro Thr Ser Asp Ser Glu Asn Leu Ser Pro 20 25 _ _ 30 Asp Glu Leu Glu Leu Leu Ala Lys Leu Glu Glu Gln Asn Arg Leu Leu 35 40 45 Glu Ala Asp Ser Lys Ser Met Arg Ser Met Asn Gly Ser Arg Asn 50 55 60 Ser Gly Ser Ser Leu Val Ser Ser Ser Ser Ala Ser Ser Asn Leu Ser 65 70 75 80 His Leu Glu Glu Asp Thr Trp Ile Leu Trp Gly Arg Ile Ala Asn Glu 90 95 Trp Glu Glu Trp Arg Arg Lys Glu Lys Leu Leu Lys Glu Leu Ile 105 Arg Lys Gly Ile Pro His His Phe Arg Ala Ile Val Trp Gln Leu Leu 115 120 125 Cys Ser Ala Thr Asp Met Pro Val Lys Asn Gln Tyr Ser Glu Leu Leu 130 140 Lys Met Ser Ser Pro Cys Glu Lys Leu Ile Arg Arg Asp Ile Ala Arg 145 150 155 160 Thr Tyr Pro Glu His Glu Phe Phe Lys Gly Gln Asp Ser Leu Gly Gln 165 170 175 165 Glu Val Leu Phe Asn Val Met Lys Ala Tyr Ser Leu Val Asp Arg Glu 180 185 190 Val Gly Tyr Cys Gln Gly Ser Ala Phe Ile Val Gly Leu Leu Leu Met Gln Met Pro Glu Glu Glu Ala Phe Cys Val Phe Val Arg Leu Met Gln 210 215 220 Glu Tyr Arg Leu Arg Glu Leu Phe Lys Pro Ser Met Ala Glu Leu Gly 225 235 240 Leu Cys Ile Tyr Gln Phe Glu Tyr Met Leu Gln Glu Gln Leu Pro Asp 245 250 255 Leu Asn Thr His Phe Arg Ser Gln Ser Phe His Thr Ser Met Tyr Ala 260 265 270 Ser Ser Trp Phe Leu Thr Leu Phe Leu Thr Thr Phe Pro Leu Pro Val 280 Ala Thr Arg Val Phe Asp Ile Phe Met Tyr Glu Gly Leu Glu Ile Val 290 295 300 Phe Arg Val Gly Leu Ala Leu Leu Gln Val Asn Gln Thr Glu Leu Met 305 310 315 320 Gln Leu Asp Met Glu Gly Met Ser Gln Tyr Phe Gln Arg Val Ile Pro 325 330 335 His Gln Phe Asp Ser Cys Pro Asp Lys Leu Val Leu Lys Ala Tyr Gln 340 350

365

Val Lys Tyr Asn Pro Lys Lys Met Lys Arg Leu Glu Lys Glu Tyr Ala 360

<210> 123 <211> 104 <212> PRT

<213> Mus musculus

<210> 124 <211> 963 <212> PRT <213> Mus musculus

<400> 124 Met Ala Asp Pro Ala Glu Cys Asn Ile Lys Val Met Cys Arg Phe Arg
1 10 15 Pro Leu Asn Glu Ser Glu Val Asn Arg Gly Asp Lys Tyr Val Ala Lys 20 25 30 Phe Gln Gly Glu Asp Thr Val Val Ile Ala Ser Lys Pro Tyr Ala Phe 35 40 45 Asp Arg Val Phe Gln Ser Ser Thr Ser Gln Glu Gln Val Tyr Asn Asp 55 Cys Ala Lys Lys Ile Val Lys Asp Val Leu Glu Gly Tyr Asn Gly Thr 60 Ile Phe Ala Tyr Gly Gln Thr Ser Ser Gly Lys Thr His Thr Met Glu 90 85 Gly Lys Leu His Asp Pro Glu Gly Met Gly Ile Ile Pro Arg Ile Val 105 11Ŏ Gln Asp Ile Phe Asn Tyr Ile Tyr Ser Met Asp Glu Asn Leu Glu Phe 120 His Ile Lys Val Ser Tyr Phe Glu Ile Tyr Leu Asp Lys Ile Arg Asp 130 140 135 Leu Leu Asp Val Ser Lys Thr Asn Leu Ser Val His Glu Asp Lys Asn 145 150 155 160 Arg Val Pro Tyr Val Lys Gly Cys Thr Glu Arg Phe Val Cys Ser Pro 165 170 175 Asp Glu Val Met Asp Thr Ile Asp Glu Gly Lys Ser Asn Arg His Val 190

Ala Val Thr Asn Met Asn Glu His Ser Ser Arg Ser His Ser Ile Phe Leu Ile Asn Val Lys Gln Glu Asn Thr Gln Thr Glu Gln Lys Leu Ser Gly Lys Leu Tyr Leu Val Asp Leu Ala Gly Ser Glu Lys Val Ser Lys Thr Gly Ala Glu Gly Ala Val Leu Asp Glu Ala Lys Asn Ile Asn Lys 245 250 255 Ser Leu Ser Ala Leu Gly Asn Val Ile Ser Ala Leu Ala Glu Gly Ser 260 265 270 Thr Tyr Val Pro Tyr Arg Asp Ser Lys Met Thr Arg Ile Leu Gln Asp Ser Leu Gly Gly Asn Cys Arg Thr Thr Ile Val Ile Cys Cys Ser Pro Ser Ser Tyr Asn Glu Ser Glu Thr Lys Ser Thr Leu Leu Phe Gly Gln Arg Ala Lys Thr Ile Lys Asn Thr Val Cys Val Asn Val Glu Leu Thr Ala Glu Gln Trp Lys Lys Lys Tyr Glu Lys Glu Lys Glu Lys Asn Lys Thr Leu Arg Asn Thr Ile Gln Trp Leu Glu Asn Glu Leu Asn Arg Trp Arg Asn Gly Glu Thr Val Pro Ile Asp Glu Gln Phe Asp Lys Glu Lys Ala Asn Leu Glu Ala Phe Thr Ala Asp Lys Asp Ile Ala Ile Thr Ser 385 390 395 400 Asp Lys Gly Ala Ala Ala Val Gly Met Ala Gly Ser Phe Thr Asp Ala Glu Arg Arg Lys Cys Glu Glu Glu Leu Ala Lys Leu Tyr Lys Gln Leu Asp Asp Lys Asp Glu Glu Ile Asn Gln Gln Ser Gln Leu Val Glu Lys Leu Lys Thr Gln Met Leu Asp Gln Glu Glu Leu Leu Ala Ser Thr Arg 450 455 460 Arg Asp Gln Asp Asn Met Gln Ala Glu Leu Asn Arg Leu Gln Ala Glu Asn Asp Ala Ser Lys Glu Glu Val Lys Glu Val Leu Gln Ala Leu Glu Glu Leu Ala Val Asn Tyr Asp Gln Lys Ser Gln Glu Val Glu Asp Lys Thr Lys Glu Tyr Glu Leu Leu Thr Asp Glu Phe Asn Gln Lys Ser Ala 515 520 525 _ Thr Leu Ala Ser Ile Asp Ala Glu Leu Gln Lys Leu Lys Glu Met Thr 530 540 Asn His Gln Lys Lys Arg Ala Ala Glu Met Met Ala Ser Leu Leu Lys 545 550 560 Asp Leu Ala Glu Ile Gly Ile Ala Val Gly Asn Asn Asp Val Lys Gln · 570 Pro Glu Gly Thr Gly Met Ile Asp Glu Glu Phe Thr Val Ala Arg Leu Tyr Ile Ser Lys Met Lys Ser Glu Val Lys Thr Met Val Lys Arg Cys Lys Gln Leu Glu Ser Thr Gln Thr Glu Ser Asn Lys Lys Met Glu Glu Asn Glu Lys Glu Leu Ala Ala Cys Gln Leu Arg Ile Ser Gln His Glu Ala Lys Ile Lys Ser Leu Thr Glu Tyr Leu Gln Asn Asp Glu Gln Lys Lys Arg Gln Leu Glu Glu Ser Leu Asp Ser Leu Gly Glu Glu Leu Val Gln Leu Arg Ala Gln Glu Lys Val His Glu Met Glu Lys Glu His Leu Asn Lys Val Gln Thr Ala Asn Glu Val Lys Gln Ala Val Glu Gln Gln

```
Ile Gln Ser His Arg Glu Thr His Gln Lys Gln Ile Ser Ser Leu Arg
                                                             720
                    710
                                         715
Asp Glu Val Glu Ala Lys Glu Lys Leu Ile Thr Asp Leu Gln Asp Gln
                725
                                     730
Asn Gin Lys Met Val Leu Glu Thr Glu Arg Leu Arg Val Glu His Glu
            740
   Leu Lys Ala Thr Asp Gln Glu Lys Ser Arg Lys Leu His Glu Leu
755
                                745
                                                     750
    Val Met Gln Asp Arg Arg Glu Gln Ala Arg Gln Asp Leu Lys Gly 770 780
Leu Glu Glu Thr Val Ala Lys Glu Leu Gln Thr Leu His Asn Leu Arg
785 790 795 800
                                                             80Ō
Lys Leu Phe Val Gin Asp Leu Ala Thr Arg Val Lys Lys Ser Ala Glu
                805
                                     81Ō
                                                         815
Val Asp Ser Asp Asp Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys Ile
            820
                                 825
                                                     830
Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln
        835
                            840
                                                 845
Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu
                        855
                                             860
Phe Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala
                                         875
                    870
                                                             880
Leu Lys Glu Ala Lys Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr Gln
                                     89Ŏ
                885
                                                         895
Gln Glu Val Asp Arg Ile Lys Glu Ala Val Arg Ser Lys Asn Met Ala
900 905 910
Arg Arg Gly His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly Gln 915 920 925
His Pro Ala Ala Ser Pro Thr His Pro Gly Thr Val Arg Gly Gly Gly
                        935
    930
Ser Phe Val Gln Asn Asn Gln Pro Val Gly Leu Arg Gly Gly Gly Gly
945
                    950
                                         955
                                                             960
Lys Gln Ser
<210>
       125
       45
<211>
<212>
       PRT
<213>
      Mus musculus
<400>
      125
Val Cys Val Asn Val Glu Leu Thr Ala Glu Gln Trp Lys Lys Lys Tyr
                                     10
Glu Lys Glu Lys Glu Lys Asn Lys Thr Leu Arg Asn Thr Ile Gln Trp
20 25 30
                                25
Leu Glu Asn Glu Leu Asn Arg Trp Arg Asn Arg Glu Thr
<210>
       126
<211>
       306
<212>
       DNA
<213>
      Mus musculus
<400>
                                                                        60
atgttgagtc gactgcagga gctccgcaag gaggaggaaa ccctgctgcg tctaaaggcg
gcictăcăcg accaactgaa ccgccicaag gtigaagaat tagccctica atccatgata
                                                                       120
                                                                       180
aattctcgag gaaggaccga gacactgtct tctcagcctg cacctgaaca gttatgtgat
                                                                       240
atgtccctac atgtagacaa cgaagtgaca ataaatcaga ctacactgaa gctgagcaca
                                                                       300
306
gattcg
<210>
       127
<211>
       260
<212>
      DNA
```

<213> Mus	musculus					
aaggaggagg aaggttgaag tcttctcagc	gcgccctaag aaaccctgct aattagccct ctgcacctga agacgactga	gcgtctaaag tcaatccgtg	gcggctctac ataaattctc	acgaccaact gaggaaggac	gaaccgcctc cgagacactg	60 120 180 240 260
<210> 128 <211> 252 <212> DNA <213> Mus	musculus					
gaaacccagc gaattagccc	ggaagtggaa tgcgtctaaa ttcaatccat aacagttatg	ggcggctcta gataaattct	cacgaccaac cgaggaagga	tgaaccgcct ccgagacact	caaggttgaa gtcttctcag	60 120 180 240 252
<210> 129 <211> 250 <212> DNA <213> Mus	musculus					
gaaacccagc gaattagccc	ggaagtggaa tgcgtctaaa ttcaatccat aacagttatg	ggcggctcta gataaattct	cacgaccaac cgaggaagga	tgaaccgcct ccgagacact	caaggttgaa gtcttctcag	60 120 180 240 250
<210> 130 <211> 249 <212> DNA <213> Mus	musculus					
gaaacccagc gaattagccc	ggaagtggaa tgcatctaaa ttcaatccat aacagttatg	ggcggctcta gataaattct	cacgaccaac cgaggaagga	tgaaccgcct ccgagacact	caaggttgaa gtcttctcag	60 120 180 240 249
<210> 131 <211> 249 <212> DNA <213> Mus	musculus					
gaaaccctgc gaattagccc	ggaagtggaa tgcgtctaaa ttcaatccat aacagttatg	ggcggctcta gataaattct	cacgaccaac cgaggaagga	tgaaccgcct ccgagacact	caaggttgaa gtcttctcag	60 120 180 240 249
<210> 132 <211> 195 <212> DNA <213> Mus	musculus					
<400> 132 agcgccctaa	ggaagtggaa	ggggatgttg	agtcgactgc 51	aggagctccg	caaggaggag	60

gaaacccagc tgcgtctaa gaattagccc ttcaatcca cctgcacctg aatca	a ggcggctcta it gataaattct	cacgaccaac cgaagaagga	tgaaccgcct ccgagacact	caaggttgaa gtcttctcag	120 180 195
<210> 133 <211> 227 <212> DNA <213> Mus musculus					
<pre><400> 133 gccctaagga agtggaagg accctgctgc gtctaaagg ttagcccttc aatccatga gcacctgaac agttatgtg</pre>	jc ggctctacac it aaattctcga	gaccaactga ggaaggaccg	accgcctcaa agacactgtc	ggttgaagaa	60 120 180 227
<210> 134 <211> 289 <212> DNA <213> Mus musculus					
<400> 134 ccctaaggaa gtggaaggg ccctgctgcg tcaaaaggg taccccttca atccatgat cacctgaaca gttatgtga ctacactgaa gctgagca	g gctctacacg a aattctcgag at atgtccctac	accaactgaa gaaggaccga atgtagacaa	ccgcctcaag gacactgtct cgaagtgaca	gttgaagaat tctcagcctg	60 120 180 240 289
<210> 135 <211> 248 <212> DNA <213> Mus musculus					
<400> 135 ccccaaggaa gtggaaggg ccctgctgcg tctaaaggg tagcccttca atccatgat cacctgaaca gttatgtga ctacacgg	g gctctacacg a aattctcgag	accagctgaa gaaggaccga	ccgcctcaag gacactgtct	gttgaagaat tctcagcctg	60 120 180 240 248
<210> 136 <211> 248 <212> DNA <213> Mus musculus					
<400> 136 ccctaaggaa gtggaaggg ccctgctgcg tttaaaggg tagcccttca atccatgat cacctgaaca gttatgtga ctacacgg	g gctctacacg a aattcccgag	accaactgaa gaaggaccga	ccgcctcaag gacactgtct	gttgaagaat tttcagcctg	60 120 180 240 248
<210> 137 <211> 185 <212> DNA <213> Mus musculus					
<400> 137 ccctaaggaa gtggaaggg ccctgctgcg tctaaaggc tagcccttca atccatgat cacga	g gctctacacg	accaactgaa	ccgcctcaag	gttgaagaat	60 120 180 185
<210> 138 <211> 161					

<212> DNA <213> Mus m	nusculus					
<400> 138 ccctaaggaa g ccctgctgcg t tagcccttca a	ctaaaggcg	gctctacacg	accaactgaa	ccgcctcaag	gaggaggaaa gttgaagaat	60 120 161
<210> 139 <211> 155 <212> DNA <213> Mus m	nusculus					
<400> 139 ccctaaggaa g ccctgctgcg t tagcccttca a	ctaaaggcg	gctctacacg	accaactgaa	gctccgcaag ccgcctcaag	gaggaggaaa gttgaagaat	60 120 155
<210> 140 <211> 261 <212> DNA <213> Mus m	nusculus					
<400> 140 cctaaggaag t cctgctgcgt c agcccttcaa t acctgaacag t	taaaggcgg ccatgataa	ctctacacga attctcgagg	ccaactgaac aaggaccgag	cgcctcaagg acactgtctt	ttgaagaatt ctcagcctgc	60 120 180 240
tacactgaag c	tgagcacaa	a				261
<210> 141 <211> 249 <212> DNA <213> Mus m	nusculus					
<400> 141 cctaaggaag t cctgctgcgt c agcccttcaa t acctgaacag t tagcactaa	taaaggcgg ccatgataa	ctctacacga attctcgagg	ccaactgaac aaggaccgag	cgcctcaagg acactgtctt	ttgaagaatt ctcagcctgc	60 120 180 240 249
<210> 142 <211> 285 <212> DNA <213> Mus m	nusculus					
<400> 142 ctaaggaagt g ctgctgcgtc t gcccttcaat c cctgaacagt t acactgaagc t	aaaggcggc catgataaa atgtgatat	tctacgcgac ttctcgagga gtccctacat	caactgaacc aggaccgaga gtagacaacg	gcctcaaggt cactgtcttc aagtgacaat	tgaagaatta tcagcctgca	60 120 180 240 285
<210> 143 <211> 285 <212> DNA <213> Mus m	nusculus					
<400> 143 ctaaggaagt g ctgctgcgtc t gcccttcaat c	aaaggcggc	tctacacgac	caactgaacc	gcctcaaggt	tgaagaatta	60 120 180

cctgaacagt ta acactgaagc tg					aaatcagact	240 285
<210> 144 <211> 248 <212> DNA <213> Mus mu	usculus					
<400> 144 ctaaggaagt gg ctgctgcgtc ta gcccttcaat cc cctgaacagt ta acactgaa	aaaggcggc catgataaa	tctacacgac ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 248
<210> 145 <211> 248 <212> DNA <213> Mus mu	ısculus					
<pre><400> 145 ctaaggaagt gg ctgctgcgtc ta gcccttcaat cc cctgaacagt ta acactgaa</pre>	aagggcggc catgataaa	tctacacgac ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt caccgtcttc	tgaagaatta tcagcctgca	60 120 180 240 248
<210> 146 <211> 245 <212> DNA <213> Mus mu	usculus					
<400> 146 ctaaggaagt gg ctgctgcgtc ta gcccttcaat cc cctgaacagt ta acaag	aaaggcggc catgataaa	tctacacgac ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 245
<210> 147 <211> 246 <212> DNA <213> Mus mu	ısculus					
<400> 147 ctaaggaagt gg ctgctgcgtc ta gcccttcaat cc cctgaacagt ta acacga	aaggcggc catgataaa	tctacacgac ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 246
<210> 148 <211> 246 <212> DNA <213> Mus mu	ısculus					
<400> 148 ctaaggaagt gg ctgctgcgtc ta gcccttcaat cc cctgaacagt ta acaccg	aaggcggc atgataaa	tctacacgac ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 246
<210> 149			5.4			

<211> 246 <212> DNA <213> Mus musculus					
<400> 149 ctaaggaagt ggaagggc ctgctgcgtc taaatgcg gcccttcaat ccatgata cctgaacagt tatgtgat acactg	gc tctacacgac aa ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 246
<210> 150 <211> 246 <212> DNA <213> Mus musculus					
<400> 150 ctaaggaagt ggaagggg	at gttgagtcga	ctgcaggagc	tccgcaatga	ggaggaaacc	60
ctgctgcgtc taaaggcg gcccttcaat ccatgata cctgaacagt tatgtgat acactg	aa ttctcgagga	aggaccgaga	cactgtcttc	tcagcctgca	120 180 240 246
<210> 151 <211> 246 <212> DNA <213> Mus musculus					
<400> 151 ctaaggaagt ggaagggg ctgctgcgtc taaaggcg gcccttcaat ccatgata cctgaacagt tatgtgat acactg	gc tctacacgac aa ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgta	60 120 180 240 246
<210> 152 <211> 246 <212> DNA <213> Mus musculus					
<400> 152 ctaaggaagt ggaagggg ctgctgcgtc taaaggcg gcccttcaat ccatgata cctgaacagt tatgtgat cacaaa	gc tctacacgac aa ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 246
<210> 153 <211> 246 <212> DNA <213> Mus musculus					
<400> 153 ctaaggaagt ggaagggg ctgctgcgtc taaaggcg gcccttcaat ccatgata cctgaacagt tatgtgat cacaaa	gc tctacacgac aa ttctcgagga	caactgaacc aggaccgaga	gcctcaaggt cactgtcttc	tgaagaatta tcagcctgca	60 120 180 240 246
<210> 154 <211> 189 <212> DNA <213> Mus musculus					

ctgctgcg	gt ggaaggggat tc taaaggcggc at ccatgataaa	tctacacgac	caactgaacc	gcctcaaggt	tgaagaatta	60 120 180 189
<211> 18 <212> DI	55 89 NA us musculus					
ctgctgcg	gt ggaaggggat tc taaatgcggc at ccatgataaa	tctacacgac	caactgaacc	gcctcaaggt	tgaagaatta	60 120 180 189
<211> 18 <212> DI	56 80 NA us musculus					
ctgctgcg	56 gt ggaaggggat tc taaaggcggc at ccatgataaa	tctacacgac	caactgaacc	gcctcaaggt	tgaagaatta	60 120 180
<211> 24 <212> DI	57 45 NA us musculus					
taagggagt tgctgcgtd cccttcaat	57 tg gaaggggatg ct aaaggcggct tc catgataaat tt atgtgatatg	ctacacgacc tctcgaggaa	aactgaaccg ggaccgagac	cctcaaggtt actgtcttct	gaagaattag cagcctgcac	60 120 180 240 245
<211> 14 <212> DI	58 47 NA us musculus					
acctgctg	58 gt aaatgaaggc gg gctggagaga tg cttggaggtg	ttcaggcctc				60 120 147
<211> 15 212 DN	59 52 NA us musculus					
tgctgcgt	59 tg gaaggggatg ct aaaggcggct tc catgataaat	ctacacgacc	aactgaaccg			60 120 152
<211> 24 <212> DN	50 43 NA musculus					

<400> 160 aggaagtgga aggggatgtt gagtcgactg caggagctcc gcaaggagga ggaaaccctg ctgcgtctaa aggcggctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc cttcaatcca tgataaattc tcgaggaagg accgagacac tgtcttctca gcctgcacct gaacagttat gtgatatgtc cctacatgta gacaacgaag tgacaataaa tcagactaca ctg	60 120 180 240 243
<210> 161 <211> 243 <212> DNA <213> Mus musculus	
<400> 161 aggaagtgga aggggatgtt gagtcgactg caggagctcc gcaaggagga agaaaccctg ctgcgtctaa aggcggctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc cttcaatcca tgataaattc tcgaggaagg accgagacac tgtcttctca gcctgcacct gaacagttat gtgatatgtc cctacatgta gaccacgaag tgacaataaa tcagactaca ctg	60 120 180 240 243
<210> 162 <211> 243 <212> DNA <213> Mus musculus	
<400> 162 aggaagtgga aggggatgtt gagtcgactg caggagctcc gcaaggagga ggaaaccctg ctgcgtctaa aggcggctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc cttcaatcca tgataaattc tcgaggaagg accgagacac tgtcttctca gcctgcacct gaacagttat gtgatatgtc cctacatgta gacaacgaag tgacaataaa ccagacgaca ccg	60 120 180 240 243
<210> 163 <211> 243 <212> DNA <213> Mus musculus	
<400> 163 aggaagtgga aggggatgtt gagtcaactg caggagctcc gcaaggagga ggaaaccctg ctgcgtctaa aggctgctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc cttcaatcca tgataaattc tcgaggaagg accgagacac tgtcttctca gcctgcacct gaacagttat gtgatatgtc cctacatgta gacaacgaag tgacaataaa tcagacgaca ccg	60 120 180 240 243
<210> 164 <211> 243 <212> DNA <213> Mus musculus	
<400> 164 aggaagtgga aggggatgtt gagtcgactg caggagctcc gcatggagga ggaaaccctg ctgcgtctaa aggcggctct acacgaccaa ctgaacctcc tcaaggttga agaattagcc cttcaatcca tgataaattc tcgaggaagg accgagacac tgtcttctca gcctgcacct gaacagttat gtgatatgtc cctacatgta gacaacgaag tgacaataaa tctgacgaca ccg	60 120 180 240 243
<210> 165 <211> 243 <212> DNA <213> Mus musculus	
<pre><400> 165 aggaagtgga aggggatgtt gagtcgactg caggagctcc gcaaggagga ggaaaccctg ctgcgtctaa atgcggctct acacgaccaa ctgaaccgcc tcaaggtcga agaattagcc 57</pre>	60 120

cttcaatcca tgataaattc tcgaggaagg accga gaacagttat gtgatatgtc cctacatgta gacaa ccg	gacac tgtcttctca gcctgcacct 180 cgaag tgacaataaa tcagacgaca 240 243
<210> 166 <211> 243 <212> DNA <213> Mus musculus	
<400> 166 aggaagtgga aggggatgtt gagtcgactg caggactgctgctaa aggcggctct acacgaccaa ctgaacttcaatcca tgataaattc tcgaggaagg gccgaggaacagttat gtgatatgtc cctacatgta gacaaccg	ccgcc tcaaggttga agaattagcc 120 gacac tgtcttctca gcctgcacct 180
<210> 167 <211> 245 <212> DNA <213> Mus musculus	
<400> 167 aggaagtgga aggggatgtt gagtcgactg caggagetgggggggggggggggggggggggggggggggg	ccgcc tcaaggtiga ágaattagcc 120 gacac tgtcttctca gcctacacct 180
<210> 168 <211> 243 <212> DNA <213> Mus musculus	
<400> 168 aggaagtgga aggggatgtt gagtcgactg caggactgctgctctaa aggcggctct acacgaccaa ctgaacttcaatcca tgataaattc tcgaggaagg accgagaacagttat gtgatatgtc cctacatgta gacaactg	ccgcc tcaaggttga agaattagcc 120 gacac tgtcttctca gcctgcacct 180
<210> 169 <211> 245 <212> DNA <213> Mus musculus	
<400> 169 aggaagtgga aggggatgtt gagtcgactg caggagctgctctaa aggcggctct acacgaccaa ctgaagcttcaatcca tgataaattc tcgaggaagg accgaggaacagttat gtgatatgtc cctacatgta gacaagg	ccgcc tcaaggttga agaattagcc 120 gacac tgtcctctca gcctgcacct 180
<210> 170 <211> 243 <212> DNA <213> Mus musculus	
<400> 170 aggaagtgga aggggatgtt gagtcgactg caggactgctgctaa aggcggctct acacgaccaa ctgaacttcaatcca tgataaattc tcgaggaagg accga	ccgcc tcaaggttga agaattagcc 120
gaacagttat gtgatatgtc cctacatgta gacaac	cgaag tgacaataaa tcagactaga 240 243

```
<210>
       171
<211>
       243
<212>
       DNA
<213>
       Mus musculus
<400>
       171
aggaagtgga aggggatgtt gagtcgactg caggagctcc gcaaggagga ggaaaccctg
                                                                            60
ctgcgtctaa aggcggctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc
                                                                           120
cticaatcca tgatāāattc tcgaggaagg accgagacac tgtciictca gcctgcacct
                                                                           180
gaacagttat gtgatatgtc cctgcatgta gacaacgaag tgacaataaa tcagactaga
                                                                           240
                                                                           243
cca
<210>
       172
       243
<211>
<212>
       DNA
<213>
       Mus musculus
<400>
      172
                                                                            60
aggaagtggg aggggatgtt gagtcgactg caggagctcc gcaaggagga ggaaaccctg
                                                                           120
ctgcgtctaa aggcggctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc
cticaatcca tgataaattc tcgaggaagg accgagacac tgtctictca gcctgcacct
                                                                           180
gaacagttat gtgatatgtc cctacatgta gacaacgaag tgacaataaa tcagactaga
                                                                           240
                                                                           243
<210>
       173
       243
<211>
<212>
       DNA
<213>
       Mus musculus
<400> 173
aggaagtgga aggggacgtt gagtcgactg caggacctcc gcaaggagga agaaaccctg ctgcgtctaa aggcggctct acacgaccaa ctgaaccgcc tcaaggttga agaattagcc
                                                                            60
                                                                           120
cticaatcca tgataaattc tcgaggaagg accgagacac tgtcttctca gcctgcacct
                                                                           180
gaacagttat gtgatgtgtc cctacatgta gacaacgaag tgacaataaa tcagactaga
                                                                           240
cca
                                                                           243
<210>
       174
<211>
       149
<212>
       DNA
<213>
       Mus musculus
<400> 174
ggaagtggaa ggggatgttg agtcgactga aggagctccg caaggaggag gaaaccctgc
                                                                            60
tgcgtctaaa ggcggctcta cacgaccaac tgaaccgcct caaggttgaa gaattagccc
                                                                           120
                                                                           149
ttcaatccat gataaattct agaggaagg
<210>
       175
<211>
       237
<212>
       DNA
<213>
       Mus musculus
<400> 175
                                                                            60
tggaagggga tgttgagtcg actgcaggag ctccgcaagg aggaggaaac cctgctgcgt
                                                                           120
ctaaaggcgg ctctacacga ccaactgaac cgcctcaagg ttgaagaatt agcccttcaa
tccatgataa attctcgagg aaggaccgag acactgtctt ctcagcctgc acctgaacag
                                                                           180
                                                                           237
ttatgtgata tgtccctaca tgtagacaac gaagtgacaa taaatcagac tacactg
<210>
       176
<211>
       237
<212>
       DNA
<213>
       Mus musculus
<400>
       176
```

tggaagggga tgttgagtcg ctaaaggcgg ctctacacga tccatgataa attctcgagg ttatgtgata tgtccctaca	ccaactgaac aaggaccgag	cgcctcaagg acactgtctt	ttgaagaatt ctcagccagc	agcccttcaa acctgaacag	60 120 180 237
<210> 177 <211> 143 <212> DNA <213> Mus musculus					
<400> 177 ggaaggggat gttgagtcga taaaggcggc tctacacgac ccatgataaa ttctcgggga	caactgaacc				60 120 143
<210> 178 <211> 270 <212> DNA <213> Mus musculus					
<400> 178 gggatgttga gtcgactgca gcggctctac acgaccaact ataaattctc gaggaaggac gatatgtccc tacatgtaga acaaggagcc ctatggaaga	gaaccgcctc cgagacactg caacgaagtg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg acagttatgt	60 120 180 240 270
<210> 179 <211> 231 <212> DNA <213> Mus musculus					
<400> 179 gggatgttga gtcgactgca gcggctctac acgaccaact ataaattctc gaggaaggac gatacgtccc tacatgtaga	gaaccgcctc cgaggcactg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg acagttatgt	60 120 180 231
<210> 180 <211> 231 <212> DNA <213> Mus musculus					
<400> 180 gggatgttga gtcgactgca gcggctctac acgaccaact ataaattctc gaggaaggac gatatgtccc tacatgtaga	gaaccgcctc cgagacactg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg acagttatgt	60 120 180 231
<210> 181 <211> 231 <212> DNA <213> Mus musculus					
<400> 181 gggatgttga gtcgactgca gcggctctac acgaccaact ataaattctc gaggaaggac gatatgtccc tacatgtaga	gaaccgcctc cgagacactg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg acagttatgt	60 120 180 231
<210> 182 <211> 231 <212> DNA <213> Mus musculus		60			

gcggctctac acg ataaattctc gag	gactgca ggagctccgc accaact gaaccgcctc gaaggac cgagacactg atgtaga caacgaagtg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg acagttatgt	60 120 180 231
<210> 183 <211> 229 <212> DNA <213> Mus mus	culus	·			
gcggctctac acg ataaattctc gag	gactgca ggagctccgc accaact gaaccgcctc aaaggac cgagacactg atgtaga caacgaagtg	aaggttgaag tcttctcggc	aattagccct ctgctcctga	tcaatccatg	60 120 180 229
<210> 184 <211> 228 <212> DNA <213> Mus mus	culus				
gcggctctac acg ataaattctc gag	gactgca ggagctccgc accaact gaaccgcctc gaaggac cgagacactg atgtaga caacgaagtg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg	60 120 180 228
<210> 185 <211> 224 <212> DNA <213> Mus mus	culus				
gcggctctac aca ataaattctc gag	gactgca ggagctccgc accaatt gaaccgcctc gaaggac cgagacactg atgtaga caacgaagtg	aaggttgaag tcttctcagc	aattagccct ctgcacctga	tcaatccatg	60 120 180 224
<210> 186 <211> 209 <212> DNA <213> Mus mus	culus				
geggetetae aeg ataaattete gag	gactgca ggagctccgc accaact gaaccgcctc gaaggac cgagacactg atgtaga ccacgaacg	aaggttgaag	aattagccct	tcaatccatg	60 120 180 209
<210> 187 <211> 208 <212> DNA <213> Mus mus	culus				
gcggctctac acg ataaattctc gag	gactaca ggagctccgc accaact gaaccgcctc gaaggac cgagacactg atgtaga catcgaaa	aaggttgaag	aattagccct	tcaatccatg	60 120 180 208
<210> 188 <211> 203		61			

<212> <213>	DNA Mus	musculus					
gcggcto ataaati	tctc	acgaccaact	ggagctccgc gaaccgcctc cgagacactg aac	aaggttgaag	aattagccct	tcaatccatg	60 120 180 203
<210> <211> <212> <213>	189 138 DNA Mus	musculus					
gcggcto	ctac		ggagctccgc gaaccgcctc				60 120 138
<210> <211> <212> <213>	190 138 DNA Mus	musculus					
gcggcto	ctac	gtcgactgca acgaccaact gaggaagg	ggagctccgc gaaccgcctc	aaggaggagg aaggttgaag	aaaccctgct aattagccct	gcgtctaaag tcaatccatg	60 120 138
<210> <211> <212> <213>	191 139 DNA Mus	musculus					
ggcgact	cta		aggagctccg tgaaccgcct				60 120 139
<210> <211> <212> <213>	192 228 DNA Mus	musculus					
tctaca ttctcga	cga cgac agga	caactgaacc aggaccgaga	tccgcaagga gcctcaaggt cactgtcttc aagtgacaat	tgaagaatta tcagcctgca	gcccttcaat cctgaacagt	ccatgataaa	60 120 180 228
<210> <211> <212> <213>	193 208 DNA Mus	musculus					
tctacad	gac agga	caactgaacc	tccgcaagga gcctcaaggt cactgtcttc aagcgaca	tgaagaatta	gcccttcaat	ccatgataaa	60 120 180 208
<210> <211> <212>	194 208 DNA			62			

<213> Mus musculus					
<400> 194 gttgagtcga ctgcaggagc tctacacgac caactgaatc ttctcgagga aggaccgaga gtccctacat gtagacaacg	gcctcaaggt cactgtcttc	tgaagaatta	gcccttcaat	ccatgataaa	60 120 180 208
<210> 195 <211> 200 <212> DNA <213> Mus musculus					
<400> 195 cgactgcagg agctccgcaa gaccaactga accgcctcaa ggaaggaccg agacactgtc catgtagaca acgaagtgac	ggttgaagaa ttctcagcct	ttagcccttc	aatccatgat	aaattctcga	60 120 180 200
<210> 196 <211> 183 <212> DNA <213> Mus musculus					
<400> 196 cgactgcggg agctccgcaa gaccaactga accgcctcaa ggaaggaccg agacactgtc acg	ggttgaagaa	ttagcccttc	aatccatgat	aaattctcga	60 120 180 183
<210> 197 <211> 183 <212> DNA <213> Mus musculus					
<400> 197 cgactgcagg agctccgcaa gaccaactga accgcctcaa ggaaggaccg agacactgtc acg	ggttgaagaa	ttagcccttc	aatccatgat	aaattcccga	60 120 180 183
<210> 198 <211> 183 <212> DNA <213> Mus musculus					
<400> 198 cgactgcagg agctccgcaa gaccaactga accgcctcaa ggaaggaccg agacactgtc acg	ggttgaagaa	ttagcccttc	aatccatgat	ääattctcga	60 120 180 183
<210> 199 <211> 120 <212> DNA <213> Mus musculus					
<400> 199 cgactgcagg agctccgcaa gaccaactga accgcctcaa	ggaggaggaa ggttgaagaa	accctgctgc ttagcccttc	gtctaaaggc aatccatgat	ggctctacac aaattccagg	60 120
<210> 200 <211> 2868 <212> DNA		63			

<400> 200	C20CC222+5	63663±655	a+as+=+===	aabbaaaa		CO
arggragate	cagccgaatg tccgcgggga	cagcatcaaa	gtgatgtgcc	ggttccggcc	cctcaacgaa	60 120
atcgggcaag	ggaagccgta	tgtctttgac	cgagtgctgc	cgcccaacac	aacccaggag	180
caggtctaca	atgcctgtgc	aaagcagatt	gtcaaagatg	tccttgaggg	ttataatgga	240
acaatttttg	catatgggca	gacttcatca	ggaaaaactc	ataccatgga	ggggaagtta	300
	agcttatggg acgagaacct					360 420
	gggacttgct					480
aacagagtcc	cctatgtaaa	ggggtgcacc	gagaggtttg	tgtcaagccc	ggaggaggtc	540
atggatgtga	tcgatgaggg	caaagcaaac	cgacacgtgg	ctgtgacaaa	catgaacgaa	600
	ggagtcacag tcagcgggaa					660 720
	ccgagggagc					780
gctcttggaa	atgtgatttc	tgccttggca	gaagggacaa	aaacacatgt	accgtaccgg	840
gacagcaaga	tgactcggat	tctccaggac	tctctgggtg	ggaactgtag	gaccaccatt	900
	gttctccttc caaagaccat					960 1020
	agaaatatga					1080
cagcatctgg	agatggagct	gaacaggtgg	aggaacgggg	aagctgtacc	cgaggacgaa	1140
	ccaaggacca					1200
	ctgttgtgga					1260 1320
actageege	accgacagct tgaagcaaca	gatgataag	caggatgaac	tcctaactagca	cacaaaaaaa	1380
	agattcagga					1440
	aagaagtcct					1500
	tggaggacaa cactgacaac					1560 1620
caccagaaaaa	agagggccac	agagatecto	aacctocttc	tcaaggacct	gggggagata	1680
ggcggaatta	ttggcaccaa	cgatgtgaag	actctggcag	atgtgaacgg	ggtcattgag	1740
	ccatggcacg					1800
	gcaagcagct agctggcagc					1860 1920
	actacatgca					1980
	gcgaggaact					2040
	aggaaaagga					2100
	agcagatgga ttgaggagaa					2160 2220
	aacaggagag					2280
gagagagaag	tgaaactgga	gaagctccta	ttgctcaatg	acaaaaggga	gcaagccagg	2340
gaggacctca	agggactgga	ggagactgtg	tctatagaac	tccagaccct	tcataacctg	2400
cgcaaactct	tcgtccagga ggggcagcgc	toctcanaan	cagagtgaaaa	ccttcctoga	getggaeage	2460 2520
gaacagctta	ccaaggtgca	caagcagctg	qtccqqqaca	atgcagattt	gcgctgtgaa	2580
ctccccaagc	tggagaagag	gcttcgtgct	accgcagaac	gcgtcaaggc	cttggagagt	2640
	aggccaagga					2700 2760
	aggaggctgt ccatccgccc					2820
	gaggaggtgg				egeceaegee	2868
				-		
<210> 201 <211> 183						
<211> 103 <212> DNA						
	musculus					
.400 201						
<400> 201	ctcagaagca	naanatetee	ttcctnnana	acaacctooa	acanettace	60
aaggtgcaca	agcagctggt	ccgggacaat	gcagatttqc	gctgtgaact	ccccaaqctq	120
	tťcgťgcťác					180
gcc						183
<210> 202						
			64			

<211> <212> <213>	183 DNA Mus	musculus					
aaggtgc	aca	agcagccggt	gaagatctcc ccgggacaat cgcagaacgc	gcagatttgc	gctgtgaact	ccccaagctg	60 120 180 183
· = -= ·	203 183 DNA Mus	musculus					
ggcagcg aaggtgc	aca	agcagctggt	gaagatctcc ccgggacaat cgcaaaacgc	gcagatttgc	gctgtgaact	ccccaagctg	60 120 180 183
<211> <212>	204 192 DNA Mus	musculus					
aaggtgc	ictg aca iggc	agcagctggt ttcgtgctac	gaagatctcc ccgggacaat cgcaaaacgc	gcagatttgc	gctgtgaact	ccccaagctg	60 120 180 192
<211> <212>	205 192 DNA Mus	musculus					
ggcagcg aaggtgc	aca iggc	agcagctggt ttcgtgctac	gaagatctcc ccgggacaat cgcagaacgc	gcagatttgc	gctgtgaact	ccccaagctg	60 120 180 192
<211> <212>	DNA	musculus					
ggcagcg aaggtgc	aca	agcagctggt ttcgtgctac	gaagatctcc ccgggacaat cgcagaacgc	gcagatttgc	gctgtgaact	ccccaagctg	60 120 180 192
<212>	207 192 DNA Mus	musculus					
ggcagcg aaggtgc	acă iggc	agctgctggt ttcgtgctac	gaagatctcc ccgggacaat cgcagaacgc	gcagatttgc	gctgtgaact	ccccaagctg	60 120 180 192
				כט			

<210> 208 <211> 162 <212> DNA <213> Mus musculus					
<400> 208 ctggaacagc ttaccaaggt gaactcccca agctggagaa agtgcgctga aagaggccaa	gaggcttcgt	gctaccgcag	aacgcgtcaa	tttgcgctgt ggccttggag	60 120 162
<210> 209 <211> 162 <212> DNA <213> Mus musculus		,			
<400> 209 ctggaacagc ttaccagggt gaactccaca agctggagaa agtgcgctga aagaggccaa	gaggcttcgt	gctaccgcag	aacgcgtcaa	tttgcgctat ggccttggag	60 120 162
<210> 210 <211> 162 <212> DNA <213> Mus musculus					
<400> 210 ctggaacagc ttaccaaggt gaactcccca agctggagaa agtgcgctga aagaggccaa	gaggcttcgt	gctaccgcaa	aacgcgtcaa	tttgcgctgt ggccttggag	60 120 162
<210> 211 <211> 162 <212> DNA <213> Mus musculus					
<400> 211 ctggaacagc ttaccaaggt gaactcccca agctggagaa agtgcgctga aagaggccaa	gaggcttcgt	gctaccgcag	aacgcgtcaa		60 120 162
<210> 212 <211> 184 <212> DNA <213> Mus musculus					
<400> 212 ctccttcctg gataacaacc caatgcagat ttgcgctgtg acgcgtcaag gccttggaga gaaa	aactccccag	gctggagaag	atgcttcgtg	ctaccgcaga	60 120 180 184
<210> 213 <211> 162 <212> DNA <213> Mus musculus					
<400> 213 ctggaacagc ttaccaaggt gaactcccca agctggagaa agtgcgctga aagaggccaa	gaggcttcgt	gctaccgcaa	aacgcgtcaa		60 120 162
<210> 214 <211> 147		66			

<212> DNA <213> Mus musculus					
<400> 214 gcaaagacca tcaagaatac aaagaatatg aaaaagagaa gagatggagc tgaacaggtg	agagaagaac				60 120 147
<210> 215 <211> 153 <212> DNA <213> Mus musculus					
<400> 215 cagagagcaa agaccatcaa tggaaaaaga gatatgaaaa catctggaga tggagctgaa	agagaaagag	aagaacaagg			60 120 153
<210> 216 <211> 146 <212> DNA <213> Mus musculus					
<400> 216 cagagagcaa aggccatcaa tggaagaaga aatatgaaaa catctggaga tggagctgaa	agagaaagag	tctgtgaact aagaacaagg	tggaactaac ccttgaagaa	agcagaagag tgtcctccag	60 120 146
<210> 217 <211> 210 <212> DNA <213> Mus musculus					
<400> 217 tgctgttccc cttcagtctt agagcaaaga ccatcaagaa aaaaagaaat atgaaaaaga ctggagatgg agctgaacag	tacagtctct gaaagagaag	gtgaacttgg	aactaacagc	agaagagtgg	60 120 180 210
<210> 218 <211> 3081 <212> DNA <213> Mus musculus					
<pre><400> 218 atggcggaga ctaacaacga caggccgaga ttctgcgggg attattgggg gaaagccata caggtttacc acgcctgtgc acaatcttcg cttatggaca cacgaccctc agctgatggg tactccatgg atgagaacct gataagatcc gtgacctttt aaccgggtgc cgtttgtcaa ctggatgtga tcgatgaggg cacagttctc ggagccacag gagcagaagc tcagcgggaa aagacagggg cagaggggag gccctgggga acgtgatctc gacacgaaaa tgacgaggat ttcatctgct gctcgccgtc ggacagcggg cgaagaccat cagtggaaga aggctgagct cagtggaaga aggctgagct</pre>	ggācaāgttc tgtctttgac catgcagatc gacatcctca catcattccc tgaattccac ggatgtgacc gaagtccaac catcttcctc gctgtacctc cgttctggac tgcactggca tctccaggac cagctacaat caagaacact gaaggagaag	atccccattt cgcgtcttcc gtcaaagacg gggaaaacgc cggatcgctc attaaggtat aagacgaacc gaacgctttg cgtcacgtag atcaacatca gtggatctgg gaggcaaaga gagggcacca tctctgggag gacgcagaga gacgcagaga gacgcagaga gagaagacca	tccaagggga ccccaaacac tccttgctgg ataccatgga gagacatctt cttacttcga tgtccagccc ctgtcaccaa agcaggagaa ccggaagcga atatcaacaa aaagctacgt ggaactgcag ccaagtccac atctggagct aggcccagaa	cgacagcgtc cactcaggag ttacaatggc ggggaagctg caaccacatc gatttacctg tgaggacaaa agaggagatt catgaacgag cgtagagacc gatggtcagc gtcgctgtcg gccgtaccgc gactaccatg gctcatgtt gactgctgag ggagacaatt	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140

<210> 222 <211> 186 <212> DNA <213> Mus musculus					
<400> 222 cgaatcccct cctttcttga gtacgtgaca atgcagattt acggctgaga gagttaaggc aaggac	acgttgtgag	cttcctaaat	tggaaaaacg	acttcgggct	60 120 180 186
<210> 223 <211> 180 <212> DNA <213> Mus musculus					
<400> 223 ctcctttctt gagaacaacc caatgcagat ctgcgttgtg gagagttaag gccctggagg	agcttcctaa	attggaaaaa	cgacttcggg	ctacggctga	60 120 180
<210> 224 <211> 37 <212> DNA <213> Mus musculus					
<400> 224 cagaaatatg aggaagagat	ccgccgtctc	tacaagc			37
<210> 225 <211> 843 <212> DNA <213> Mus musculus					
<pre><400> 225 atggctacaa actttctagc gcagaaagga gattctatga aatggtgcca gcgtgatcct ttggctggaa gctcaggccc attgtgagga ttaccagtct ttgcagcagg ccatttccaa actccccgag ccacggcccc ccaaccaaga aaggaggcac ggcagtgacg aggaggaaga cagtacgcag agaagaaggc gatgttaaac cttgggatga atccaattgg acgggctggt cggaagctgc agatccagtg gaggagatca ccaaatttga atc</pre>	gcagatgaac ccgagacatt tggagcctcc ggaagtggag gttggaggcc acagacccaa accagcagag agataaggag caagaagccc tgagactgac ttggggggcc	gggcctgtga gcaagagcca agtggacctg aaccagaacc cggctgagct catgtctctc gacgatgagg gctgcccgac acactggtgg atggcccagc tccaagcttg gatgacaaag	cctccggctc gagagaacat gtggagacca ttcgaggcgt ctctagagaa ctatgcgtca acaaggacat tacgggagga ccaaatcctc tagagacttg tgcctgttgg tgggcaccga	ccgccaggag ccagaaatcc cagtgagctc ggtgcaagat gagttcacct agtggagccc tgacctgttc gaggctacgc catccttttg tgtgcgttcc ctatggcatc cttgctcgag	60 120 180 240 300 360 420 480 540 660 720 780 840 843
<210> 226 <211> 219 <212> DNA <213> Mus musculus					
<400> 226 gagctcattg tgaggattac caagatttgc agcaggccat tcacctactc cccgagccac gagcccccaa ccaagaaagg	ttccaagttg ggccccacag	gaggcccggc acccaacatg	tgagctctct	agagaagagt	60 120 180 219
<210> 227		69			

<211> 200 <212> DNA <213> Mus musculus	
<400> 227 attaccagtc tggaagtgga gaaccaaaac cttcgaggcg tggtgcaaga tttgcagcag gccatttcca agttggaggc ccggctgagc tctctagaga agagttcacc tactcccga gccacgaccc cacagaccca acatgtctct cctatgcgtc aagtggagcc cccaaccaag aaaggagcca caccagcaga	60 120 180 200
<210> 228 <211> 268 <212> DNA <213> Mus musculus	
<220> <221> Unsure <222> (172)	
<400> 228 agaccacagt gagctcattg tgaggattac cagtctggaa gtggagaacc agaaccttcg aggcgtggtg caagatttgc agcaggccat ttccaagttg gaggcccggc tgagctctct agagaagagt tcacctactc cccgagccac ggcccacag acccaacatg tntttccttt gcgtcaagtg gagcccccaa ccaagaaagg agccacacca gcagaggacg atgaggacaa ggacattgac ctgttcggca gaaacgag	60 120 180 240 268
<210> 229 <211> 356 <212> DNA <213> Mus musculus	
<400> 229 gagcagatga acgggcctgt gacctccagc tcccgccagg agaatggtgc cagcgtgatc ctccgagaca ttgcaagacc cagagagaac atccagaaat ccttggctgg aagctcaggc cctggagcct ccagtggacc tggtggagac cacagtgagc tcattgtgag gattaccagt ctggaagtgg agaaccagaa ccttcgaggc gtggtgcaag atttgcagca ggccatttcc aagttggagg cccggctgag ctctctagag aagagttcac ctactccccg agccacggcc ccacagaccc aacatgtctc tcccctgcgt caagtggagc ccccaaccaa gagagg	60 120 180 240 300 356
<210> 230 <211> 2547 <212> DNA <213> Mus musculus	
atgagetaca egetggacte getgggeaac egetgect acceggeget tecaacegag acceggteca getteageeg egtgageggt tececegteca geggetteeg etteageeg egtegeeeg tecetegeeg egteteege tatgeteage teggeegaga geageetega etteageeag tectegeeg tatgeteage teggeegaga geageetega etteageag tectegeegagagagagagagagagagagagagagagagagag	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140

cgagaatacc aggatctcct aggaaactcc tagaggggga cctctgtaca cacaccgaca gtcgaggccc caagctcaa aaagtggaag ccaaagagga gaaaagtctc ccgtgaagtc gaagaagagg gagaaaaccga aagaaaattg cagagacaagg caagaaaattg cctgagaaag ccaaatcccc gaggccaagg gaagtcacca aagaatcacc gatgttgcag agaaggggggaaagggaaggaaggaggaaggaggagg	agagaccaga gccctcagtc ggtccaacac agaaatggaa gaaggaagggt ggaagaaggc ggcagaaggt tgaggaaggt tgagcaaag tgagcaagaag caaggaaggc caaggaaggc ggccgagtcc agagaaggca ggccgagtcc ggagaaggca ggccgagtcc agatgtgagc ggagaaggca gtccaagaag ggcagaagca ggcagaactcag agatgtgagc agatgtgagc agatgtgagc agatgtgagc caccaagaag caccaagaag	tttagcacat acaatatcca aaatttgtgg gaaaccctca gccgaagaaa aaggaagagg gaggaagatg tccagtgaaa gaaggagagg gctgtcaagg gaggaagaga ccggtgaaaa ccggtgaaaag gaggaggaga gagaagagag gagaagagg gagaaga	tttcaggaag gtaagattca aggaggatcat cagccatcgc aggaggagga aggaggaagg aaggagtgtcaa aagatgaagg aagcagaagc aggaaatcaa aagatgaagga aagaaggaga aaaagggga agaaggcagtga agaaggcagtga ctatcaatgg gtgggcggga agaagaaagg tcaccagcga aaaaggttga	catcaccggg gaagaccaaa cgaagaaact agaggagttg accagaaggc ggaaaaggag gtcagaccag tgagcaggaa ggtcgagaaa ggccaaaacca agagaagaag gaagccaaaa ggaggagaag ggaggagagcg ggaggagaagg ggaggagaag ggaggagaag ggagga	1200 1260 1320 1380 1440 1500 1560 1620 1680 1740 1800 1920 1980 2040 2100 2220 2280 2340 2460 2520 2547
<210> 231 <211> 150 <212> DNA <213> Mus musculus					
<pre><400> 231 agctaccagg acaccatcca gctcgtcatt tgcgagaata atcgccgcgt acaggagact</pre>	ccaggatctc				60 120 150
<210> 232 <211> 167 <212> DNA <213> Mus musculus					
<400> 232 cacgacctca gcagctacca aagtgggaaa tggctcgtca ctggacatcg agatcgccgc	tttgcgagaa	taccaggatc	tccttaacgt	tcggggaacc caagatggcc	60 120 167
<210> 233 <211> 159 <212> DNA <213> Mus musculus					
<400> 233 ctcagcagct accaggacac gaaatggctc gtcatttgcg atcgagatcg ccgcgtacag	agaataccag	gatctcctta			60 120 159
<210> 234 <211> 116 <212> DNA <213> Mus musculus					
<400> 234 cttcggggaa ccaagtggga gtcaagatgg ccctggacat					60 116

```
2988
 <211>
 <212>
                  DNA
 <213>
                  Mus musculus
 <400>
 atgaagcgca tcttctcctg ctccagttca caagtggcgg tggagaaatg gaaccgacgt
                                                                                                                                                                                      60
gatcagaagc tgctggaggc ggtgcagcgg ggggacgtgg gacgcgtggc tgccttggcc tctaggaagt cagcccgacc caccaaacta gactcaaatg gccagtccc gttccatctg gcagcctcca aaggcctgac agagtgtctg acaatactgc ttgcaaatgg ggctgatatc
                                                                                                                                                                                    120
                                                                                                                                                                                    180
                                                                                                                                                                                    240
aacagcaaga acgaggacgg aagcactgcc cttcatttgg ccaccatctc ctgtcagcca
                                                                                                                                                                                    300
cagtőtgtőa agőtőttgőt tcágcacőgt gctaatgaág atgctgtgga tgcagaáaat cgcagtccat tacactgggc agcctcctct ggctgcgcct caagtgtcct cctgctgtgt
                                                                                                                                                                                    360
                                                                                                                                                                                    420
gaccacgaag ccttcctgga cgtgctggat aatgatggac gcacacccct gatgattgca tcgctgggtg gtcatgcagc tatctgctca cagctgttgc agagaggtgc ccgagttaat gtcacagaca aggatgacaa atcagctttg atcctggct gtgagaaagg cagcgctgag gtggccgagc tgctcctgag ccatggagcg gacgctggag cggtggacag tttgggacac aacgctcttc attatgcttt gcgtacacaa gacaaggagc tgtggaggct gttacagcag
                                                                                                                                                                                    480
                                                                                                                                                                                    540
                                                                                                                                                                                    600
                                                                                                                                                                                    660
                                                                                                                                                                                    720
gccctgaacc ggcggcggag aggcggtcat ggactggttc aacacccaga tcacccatct
                                                                                                                                                                                    780
caggcctctt catgigagcc tcgggiggga tctcctccta agaactcacg gaaagtggag
                                                                                                                                                                                    840
                                                                                                                                                                                    900
cctgaggaag agcaggagga ggaggggag gagcggtgct cagaagagtg gaggtggaag
ttcgaggagg agcagaggaa agttcatcag ctggagcagg agctcgtgcg aaagacagat gagtgcaagg ctcacgctgc agccttctca agcctagagg agcagattcg agagcaagcg caagaactag gccatctcct agtgcaagaa ccgggagctc caggaaatca aggccctggt
                                                                                                                                                                                   960
                                                                                                                                                                                 1020
                                                                                                                                                                                 1080
ctccggcctg agggagatgg tatggaggag ggttgtcccc tgaacctgct ggctgagcgg atccaagagc tgaagaagca gcagaaggca ctggctacaa taaacccaac attagttccc
                                                                                                                                                                                  1140
                                                                                                                                                                                 1200
aagagagctg aagaattagc cccggctgag atccatcatg aagtacacag aaagtcccaa
                                                                                                                                                                                 1260
ccagagcagg ggctgcccca gggcccaagt tcagaaacca ccgggaaagc cacaggacag
                                                                                                                                                                                 1320
caaccaaaca ccaatggggg gcagaacctt ggcctccaga acactgagca ggtgtgtgct
                                                                                                                                                                                 1380
ggccagaagg agaggacccc agctccaggg actgaaacag caggcacagt gggagaacca
                                                                                                                                                                                 1440
                                                                                                                                                                                 1500
gtgggcatag ccatgaatca gctcctccta cagctaaggg aagagctggc tgcagtgtgg
cgagaaaagg atgctgccag aggggctttg tcaagaccag ttctggaggg agccctgggg actcccagag ctgaggctgc agcagctgcc tgggaaaaga tggaagccag gcttgagagg
                                                                                                                                                                                 1560
                                                                                                                                                                                 1620
gtgctggtaa ggttagatgg agcaaagatg ggactgcatg tgaaacctga ggtccctgtc caggggtcca gagacggagc cccgaaggca gtcccgggat gctctaaaga gcaggaagaa aagaaggctc ttggaaccag aggagagccc ttaggggccc ctggaaaaga acaggcctta
                                                                                                                                                                                 1680
                                                                                                                                                                                 1740
                                                                                                                                                                                 1800
ggaggaggcc tggcaaaggg acagctggag aaagaggtgt cagctttgag actgagcaat
                                                                                                                                                                                 1860
agcaactigc tggaggaatt gggagagitg gggcgcgaga gacaacgcti gcagggagag
                                                                                                                                                                                 1920
ctgcagtcct tgacccagag gctacaccgg gagtttgtgc ccaagcccga ggcacaggtc
                                                                                                                                                                                 1980
cagctacagc agttgcggag gagcgtgggg atgttgacag aggaactggc catggagaag gaggccacag ataagctgcg caggctactg gcctcccaga ctagcggcct ccaaggactg tggaaatgcc taccccaga cctcgtgggc aaggggaata cacagagtac agctgcagaa cccctggagg agctgcaggc ctgcatcagc accctggtgg ataggcacct tgaggctcaa cgggtgctgg ctcggttgga agaggaaaac cagcagctga ggggaaccag aggcctccct caaggttaca gcaccccgc aagtggccgc cctggaggaa
                                                                                                                                                                                 2040
                                                                                                                                                                                 2100
                                                                                                                                                                                  2160
                                                                                                                                                                                 2220
                                                                                                                                                                                 2280
                                                                                                                                                                                 2340
gatctgggaa tgctagagga agagctacgg gccgtgcagg ccacgatgag tgggaagagc
caggagattt gcaagctgaa acaactgctc taccaagcca cggaagaagt ggccgagctg
                                                                                                                                                                                 2400
                                                                                                                                                                                 2460
                                                                                                                                                                                 2520
agagctcggg aagcagccag cctgcgccag cacgagaaga cgcgaggctc gctggtggcc
cagging anything the street of the street of
                                                                                                                                                                                 2580
                                                                                                                                                                                 2640
                                                                                                                                                                                 2700
                                                                                                                                                                                 2760
                                                                                                                                                                                 2820
                                                                                                                                                                                 2880
cacgaagaga tcatctccac atacaggagt catctactga atgctgctcg gggctacatg
                                                                                                                                                                                 2940
gaacaagacg tctacaacat cctacttcga atcctcagca tgcaggag
                                                                                                                                                                                 2988
<210>
                  236
                  204
<211>
<212>
                  DNA
<213>
                  Mus musculus
<400> 236
ggcctggcaa agggacagct ggagaaagag gtgtcagctt tgagactgag caatagcaac
                                                                                                                                                                                      60
```

<210>

235

ttgctggagg aattgggaga tccttgaccc agaggctaca cagcagttgc ggaggagcgt	ccgggagttt	gagagacaac gtgcccaagc	gcttgcaggg ccgaggcaca	agagctgcag ggtccagcta	120 180 204
<210> 237 <211> 204 <212> DNA <213> Mus musculus					
<400> 237 ggcctggcaa agggacagct ttgctggagg aattgggaga tccttgaccc agaggctaca cagcagttgc ggaggagcat	gttggggcgc ccgggagttt	gagagacaac	gcttgcaggg	agagctgcag	60 120 180 204
<210> 238 <211> 204 <212> DNA <213> Mus musculus					
<pre><400> 238 ggcctggcaa agggacagct ttgctggagg aattgggaga tccttgaccc agaggctaca cagcagttgc ggaggagcgt</pre>	gttggggcgc ccgggagttt	gagagacaac	gcttgcaggg	agagctgcag	60 120 180 204
<210> 239 <211> 1350 <212> DNA <213> Mus musculus					
atgatggacg tctctcggac ttacagctta agctaagagc atgaccgcag aaaattagaag atgaccgcag aaaattagaaga aactgagtca gcggccgatg aagaaggtggt gaagaaatg aagctcatga gaggagaaga aagctcatga gaggagaaga gagaagctgc gcaatgaggc aaccctccc ctcagtcgaa gagacactcc cctcgatgc caataaggc gcaataggc ccactccc tacggtgtc ccaccacca tacgatatgg ccattacca catacacca ttagacccc gaccactca aggctcaagaccca aggctcaagaccca aggctcaa aggcttcaaa aggctcacagaccca aggctcaa aggcttcaaa aggcttcaaa aggcttcaaa aggcttcaaa	atcgatgicc ctcgctgcag ggagatcctg agaagagtat tctggctgca acagaaaaca taattggctc taacttaagg cgtgattgta gctgagccag cctaccagca tagaagtgaa atctggcaaa atctggcaaa gagctcttct accacctccc tccaggcatg acgggacctg aggttcactc tggtcctcag gagagagaa	actaaatgta actgctaaag aatgagctgt gagcggcaag gaggaagtga gaacgttcat aaagctcgtg cacaaattac aagccgatgc aatggctctt gagccgcctg tttgggtcac cactctgctt cccgctaagg ccaggggtgc cagctatgtg catccaccac cctcttgatc ggtccaagag gaatacccac	acctggaaga ctgggttgga accagcagaa acagagagca aaacgtacaa ttaaaaacca ctgcagagag tggaaatgac caggaagacc ttggcccatc ggagacctct tggacaggca ctgacccggg ccgtggatga ctctcatggg gtgggccttt taggcgtaag ctcgggaatt agttctttat caccaccacc	ccaaatcaag agacgagtgc ggagatggcg gaggctcacg gcggcgaatc gattgctgct agccatggca tcaaaagatg gaacacacag ccctgtgagt ctctgccaca tttacctcgc tcccgctcct gggcaaggtt aggcccagtg tgggcctcgc agaatatgca tttaccagga tcctggtacc tgctgtaaga	60 120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1260 1320 1350
<210> 240 <211> 174 <212> DNA <213> Mus musculus					
<400> 240 cttttacagc ttaagctaag aagaaattag aagatgaccg					60 120

tgcaaaactt	tgaggcagaa	agtggagatc	ctgaatgagc	tgtacctgca	gacg	174
<210> 241 <211> 132 <212> DNA <213> Mus	musculus					
<400> 241 ctggaagacc gggttggaag cagcagagta	acgagtgcaa	attagaagat aactctgagg	gaccgcagct cagaaagtgg	cgctgcagac agatcctgaa	tgctaaagct tgagctgtac	60 120 132
<210> 242 <211> 675 <212> DNA <213> Mus	musculus					
gtgctgcaag gtgaaaggaa gcaaactatg ccacctccta gttccgcaga aacgtggctc gaggctgacg gacgggcttg tgccaggaac	cagctttcaa aattccaaga atggaaagga acccaggtga ggacgtcccc cgccctgcat cccagatcct agaaagaacg atgagagcga agggatttgc	ccaggccaaa gaagatgggt taattttgag ttacaaccct tcagatcttc cacaggcccc cctccggaag cgagcttaac agatttctat gaacagcccc accccctgag	gttgacaaaa tttatacagt ctgctggcgc aacaaatcca aagaacatgc aatccccct cagcagctgc ttcagcaaat gtcatctcgg	tcattcccgt ggtttaagaa ggcagggcca agaaactcat agacctctgg cagcccgaaa tggacttgaa tgcgagacat gcatcattgg	agagaagtta attctttgac ggacgtagca tggcacagca acgactcagc cggtggccat gctgaccgta cgagctgatc cattctctat	60 120 180 240 300 360 420 480 540 600 660 675
<210> 243 <211> 258 <212> DNA <213> Mus	musculus					
ttgaagctga gacatcgagc	ccgtagacgg tgatctgcca tctatgccac	tgacgcccag gcttgagaga ggaacatgag ggaggaggga	gaacgagatt agcgagaaca	tctatttcag gccccgtcat	caaattgcga ctcgggcatc	60 120 180 240 258
<210> 244 <211> 1455 <212> DNA <213> Mus	o musculus					
aggttatttt aataaaatga gatactgcct cccagatttg gaagtttcaa caagtcagcc gagttacaga aatgaaaacc caaatgcagc tcagagatga caacgtagct ctgaaagcgg gtcgacgctc	atcacattgt atcttcctgg atcctgaaac acaaagcttt ctcagctggc atcgaggtgc aagacgttag tacgcaggaa agatagagac agatgctaaa tacaaagctt agctagggac tgaatgatga	accagctttc tgattcagat agaggtgact taacgatgct caaacatgta ccgggccttc tctgactgga gaaggcagag cattgaaagg cattgaaagg ccaacaaaga agagaagaga	gaagtcagca ttcctgcctc attcctatga tttggaaaga actatggact ggttattacg gaggagctgg attaataatg aaatttaaag cagcaatcag ctgcatgcta tctcaactca ctgcagcagg	cgaaaatttt ttaacaagtt tcagtaagct cactcatctg gtattacttt acacaagaaa gtgagctgga aaattgacca catccagaga aaaagacctt tggagtccac gtctggaaga aaaacagaca	aatggagttc agatgtgaga gaggtacaat tcggagcatg ggaaggtgat gtctcgactt ggctaagctc gttgatgaac tagcatatta catgccaaag cagagagtca tcagaaaaga gctgctaaat	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900

actgttctta atggcaagat ctccagaaaa catgatacta gaggagtgta taccagacac aagaagtaca	ctgccacaac cagaagattt gtatggagcg aagagctgga tgaagaagat tgagcctgaa gccacgtgaa tgataaagcg	agaacaggaa atcagaactt ggacaattcc ctggaaaaat gaagatgacc ccgggagctg gcagttgttt caaaaaggct gcaagaggaa	gaagctatta attgacaaaa atggagaaag aaccggcaag gggtccctcc cgaaaactgg ctagatcagt	ataaaagagt cagaagctgg aacacatgga gcatgctgtt cccaggaagc agcaatgcaa ttgtgaattt	aaaagatact aattaaagag tgccataaat gaagaagaag gtttgagaag cacagagtta ctctgagcag	960 1020 1080 1140 1200 1360 1320 1380 1440 1455
<210> 245 <211> 219 <212> DNA <213> Mus	musculus					
ctgctaaatg gagaatctga	aaagaattaa ggaaacgctt	gaatgatgag actagaaggc ggaccaagta tgccacaaca	attattactc gaacaggaac	gagtagagac	ttacctgaat	60 120 180 219
<210> 246 <211> 4011 <212> DNA <213> Mus	musculus					
tcgggctcgg gagcgcctca aacgtgctgg gagctcctac cgcaaacagg gaactccaga aaaaactatg tacaatgccc agatccaaga agcaggaagg gcacagatgg cagctacagt tcctcagcag gtgccctcag agtgtcacac gatgttcagg gagcgcacag gagctccttgt ggagctgatc gtggagaatc gtggagaatc gtggagaatc gtggagaatc gtggagaacc gtgaagaatc gaggtgaacc gtgaagaacc gaggtgaacc gaggtgaacc gaggagcacac cgggaacacc cagccgacgct cacacccat ttcagccgca cgggagcaga	tcatgtcgga ttcactgcta agaaccttga gcgaggacaa ccgagggagaa tccaggtaga tgcaccagct tgcagcaagct agcgtcccac ggggcaagcac ccagcagctcac ccagcagctcac agaacaacac aagagatcacc atcctagggga acaccagcag tcctagcgga acaccagcag tcctagcgga acaccagcag tcctagcgga acaccagcag tcctagcgga caccctagcagc tcgcagccct agcagccagt ccgcaggcccct acgcagcccct acgcagccccc acgcagccccc acccgcagccccc acccgcagccccc accccgcagccccc accccgcagcccca	cgtgcctgcg ctaccagtgt cagtaccaca gccactcaac gcaggcccga gaacgtcagt ctccacccca aacccaggga ctccacggcg gttttcagtg gaactcacag taaggttgac gcaagccaaa caagtcagg tgagatggcc ggaggatggc ggaggatggc ggaggctgtg ggaggctgtg ggaggctgtg ggagttcttc ggagttcttc ggagttcttc ggagttcttc ggagctgcc tggagtctgcc tggagttcttc ggagctgcc tggagtcctgcc tgaacccag	ggcctggcgg gtggtcaagg agcgagaacc ctcacgcaat tttgaagatg tttcagacac gaggaacgag atgatccaga ggccaaacag ggtcttccccc gggaaccact ccaaacgatg ggtaccaagt gagagcctaa ggtaccaagt gagagctgaac gagatgatg attgtaaaca ggctgatgatt cttctgtcag ggcagtagatt cttctgtcag ggcagtagatt ctaccacct caacgatcg gcagtagatt ctactgtcga gcagtagatt ctaccaccatct aacggtcgca aggtggactg ccaccatct aacggtcgca cctgatgatg ccaccatct cagcgtcgca cctgatgatg ccaccatct cagcgtcgca cctgatgatc cctgatgac cctgatgac cctgatgac cctgatgac cctgatgac cctgatgac cctgatgac cctgatgac cctgatgac cctgatcac cctgatgac cccaccaccac	gctccatcta agctcatgcc aggagcacga acgagcgcga ccttggaaca gccagctgga aatcggagat cctatgtgga aaagcagcct tggctgatgg ggcacctgag agatgtctga ccaacacacc agcccctggg atagccgtaa gcagcagtga tcatcgggaa tctttgga tcatcggga tcatcggga tcatcggga tcatcggga tcatcggga tcatcggaa cgagaacagga tcatcggaac cgagaaccgaat accaacacc agcagttctt acaaaaatgc tggaaccgaa agcagctgta accatcttgt gccatgcttt actgcacctc acgtgcgcaa agcagctgag tgtactgtcg	ccgcgagttc gctggtggtg ggtggagctg gaaggcgctg agagaagaaa gctaaaggcc gaagaaggaa acacattgaa gcccgggcgg catggtacgt tgacctcggc gtcaggccag cacgtcctcc ggactatgtc catggaggtc catggaggtc aacccgtctg aatcaacat tgtggacgaa gggcaaagaa tttaaatgta gggcaaagaa tttaaatgta ggtcctgaacaag agcatcaag caaggagctt gccagaacat cctgagccag ccagtacaag ccagtacaag ccagtacaag cccagtacaag cccagtacaag cccagtacaag cccagtacaag cccagtacaag cccagtacaag ccctctggtg	60 120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1380 1440 1500 1560 1620 1680 1740 1800 1980 2040 2160

ccacatgaag aggactctag tgtgaccggg aaggagaagg gcaaaggaaa cccctgaggc ctgacaacca gcaaggtggt ttcacagtct gcaatgccca gactatccc ctggggagat gatggtgtgc tggctggcat agcaactgta cctcacgagg accactgcca atgggaaggt gaggtgccag accctggtcc acagagcatg tctttactga gagaatgggt cagaatccaa ctctcaacaa caaccagtag ctctatgtgc tgagcctggt accctggcta tcttccatcg atggacctgg tgagcctggt accctggcta tcttccatcg atggacctgg gccacccaca tggtgtgggt cccacccaca tggtgtgggt cccacccaca tggtgtgggt cccacccaca tggtgtgggt cccacccaca tggtgtggg tctctattcg cagcacctgc aggatgtgga ctgggcttct ccttcgtgcg ggcactggca atggggttgt ggccagctcc tagggctccg ccagggggca tcatccatgt atcccctact gctccatggc aaattctttg tctctgtgcc aagcacctgc aggacctgga aagaatgcac tggtgctgag gaggatgatg aaactgagga aaggctgagc gcagccacat	cgaacccaag agatgctacc gatcattgat cgtcctgtgt gttcctagac caccctggtg agacacccca cagcgagtca ccagcaccc tggcaccatt cgctgcaccc agccaactgg gcatgtcaaa tggagaggat ccactccatc ggtggaaagc cttggatcc cattgagaccc cattgagaccc cattgagaccc cattgagaccc agccaacaag gcatgccaacaag agcaacaag agcaacaag acaggctcaac agccaacaag acaggctcaac agccaacaag acaggctcaac agccaacaag acaggctcaac agccaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag acaggctcaacaag	agcacacacc tccagtcggg gccaaccagc atctccagca agtgatgtga gggtgtgcta gtactggaca caatccacag gaagcaacga accccatcct gtacagcctc actatgtggc agccgagtgc ggccagtggg cgctgcatgg cgctgcatcgg cacccttcagcat cacctttagca tatgttcagca tatgttcagca tatgttcagca cacctttgactg cattgccaca gacagcagtg ccttgactg acatcccaa gacagcagtg ccttgacact ccggctgcag ggttacattg gacgtgaacc	catcacctga tatggatcct caggcacaat ttcctgcggc accctgaaga cccgctgcaa aggggcaggg aagaagccac cagtccggcc cagtagcacca tggagccca tggagccca tggagccat tggtagcaa agctggcaa agctgtgaaa agctgctgaa agctgcatgcag tcaccatgc aagatgcatgca tagctgcagca tgcacccatgc aagatgcaccg tagcagcaccg tagcagcaccg agatgcaaccg agatgcaaccg agatgcaaccg agactgtggga acaaggcagca acaaggcagca acaaggcagca acaaggcagca acaaggcaccg tcaatggagga acttccgtat agacaaagcc	gaagaagaag caccagcacc tgtggatcag cagtgacagt ttcaggtgct tgttccacgt ggatgtggcg agaagccaca cgggcctctc gcctgccagt cagtggggaa gaatggctgg caagtggggaa tgaccaccta tgatgagaaa tgcagatggg ctaccaccta tgatgagaaa tcagccaag ttgagaaa tcagccaag tctgtggggt cctgcatcgc accggcatgt cagtggtg cctgcatcgc cgggaacccgc tgatgctgc tgatgctgc tgatgctgc tgtgctgcacc tgatgctgc ccagaagttg cctgctgtc tgtgctgcacc ccagaagttg cctgctgtcc tgtgctgcacc ccagaagttg cctgttgtcc	2220 2280 2340 2460 2520 2580 2640 2700 2760 2880 2940 3060 3120 3180 3240 3360 3420 3480 3540 3660 3720 3780 3960 4011
<210> 247 <211> 213 <212> DNA <213> Mus musculus					
<400> 247 gagacaaaaa atgctttaaa tcaggagaac aggaggtcct ctggagaacc gaatcaaaga actgcccgcc gtgagcccag <210> 248	gaagggtgag gcttgaaaaa	ctggaagcag gaactgaaga	ccaagcaagc	caaagtcaag	60 120 180 213
<211> 2979 <212> DNA <213> Mus musculus					
<pre><400> 248 atggaggcgg cggtgtgtag gtgtgtttca tggacaaagg catgccatca atttgcattg aacctacgac atttagatct ctgacaaagc tatgcacttt gaagcactgg ttaatctgac gggttgatgc cccttcatgg tatatagata gcatccatca cttattttag agaaagatgg atcattctcc agactttacc ccagtaagct tggaagaaat aacttagttt cttctgattc tcagcaccac caatggatgt aatgttttag cctcactttt gaaaacgact ttcagaatga</pre>	cctgcacagt taataacatc gtcatctaat aaatttgtcc taaactgaac actaaagtat cttacttcag agaaggtaat acaactgaga aaactcatcc cccctgaat gttgccttct atctgtgtgt	atatcagagt tccaagatct caaataagtc tgcaatttga ttgtcttata aaacttagat tgtacagtag cctatctgcc atcttagatt catctacagt ataagtgaag ttgaaggaat ccatcttctg	tatcttiaga catccattga aaattgaagg tcacaagagt atcacataaa atattgacct gattgcactt ttataccagg gcaagaatat gcttagaagg atgaggtcaa ttaaaagtac aaccagaaaa	ttcatccatt ccacatttgg cctgaacaca ggaaggactt tgatcttagt ccatagtaat cctaaccaat gtaccgagca atttggagag acttttggat tgatgatgtg accagaagac aattaatcag	60 120 180 240 300 360 420 480 540 660 720 780 840 900

ctcaatgaaa ctaata agagacacag atata ataaaaaca atggt gatttatatg taaga aagactggcg taatta gtggaacacag taacacag ataatggaacactg aaattgaaag cgcgaagcattggaaa aaatggaacacaggc aagaag gaacacaggc aagagtg aacacagg gaacacagg aagaattaactgaa aagag gagttagcga aggattagcga agagttagcga agagttagcga agagttagcga agagttagcga agagtagcga agagtagcg	acttc tgaaagtgac aaaat cccatattat gcttt tgtaagttgt tcatc tttagtaaac aaagt agacaagaac caaga gagagagatg gatga gctacataag atagt tcacagactt gatca acaggaagat gatga gctacataag atagt tcacagactt gatca acaggaagat gataa gcagaaagca tagaa agtgcaacaa attga aactcggcag tgcaa agaagaacga ttaaa ccagcagtat agaag atttaaagat	tatggaaaca tccagaacta aatcgtaaaa tgtaataact ttctcggaca cggtggaaag caagcagatg gatgctattt caaaatgaag cacatcagac cagcagcagg gatcgagaaa cttcatgaac tttttcactg aaacatgagc ttggacttag gttcaggatg	gaagagagtg ttcaaaccat tgagacagcc tacgagactt acagcaccta ctgagcaaac agaaaaaaga ttaaggagag ttaaaaaact acctgagaac cggcacagat tacttggcgtt atgctgagtt aagaagtaaa aaaatgagtt gctttgaaga	cagcagaaaa taagcaccac ttaccttaga agatgagcag ccggtccctc ggaaaagaaa tgttcacagc acattgcaag aactattgaa cctggaaagg aagactgatc tcgaacttct gaaagagcag ccaggatgca agaataccaa ccgtattgct tgttgcgact	960 1020 1080 1140 1200 1320 1380 1440 1500 1620 1680 1740 1860 1920 1980 2040
tctttaatta aagate tgcaaactga agcage ttgattgaag atgace cagctgattt ctgage aaagtatggg gacage ttagaagccc agatte agtgactgtg atgcae cggaaactaa aagace atcgctctca tcgaaa tctatagttg agaaac taggcatgata aaggae aaagtatgaag acaage aaagtatgaag acaage aattgtggaag cgcace gactgtgcaa atttae	gaagc agcagccaat aagca gaagagcatt ctggc agccaaagag gaact ggcatgtcag gaaag tttatgcaga ttgag aataaagtgc agtt acaagaaaaa aagtg ttctcaagag ctaga gagacacaat gaact tgaagaaatc gaact tcagaacatg aagc tcagaacatg caagc tgaaataatg	ttacagaatc caaatagaac tcactgattt agctcgacac gaaaatgaat aagatcattg gatgggcaaa caacttaatg gagagaaagg agaaaagctt cttgaaatgc gcagagagag gatgatgcct cagctagcaa	adatcaacac ttctcaaaca atggcttacg tatcccagag ctctgagaaa aagaccaaaa tcaaattgct aaaagtctcc aaaaattaaa acagcacact aagtaaaaga acaaaagtct ttagaagaca	tcttgaaatt tgaaaaaacc gactgaggaa tcgtgggaaa aagccatgaa tgaaaccatc acaagaacag acaactagat gcaacagttg aaataagaaa agtaaaagaa tgagctacaa agtggatgag	2100 2160 2220 2280 2340 2400 2520 2580 2640 2700 2760 2820 2880 2940 2979
<210> 249 <211> 156 <212> DNA <213> Mus muscu	lus				
<400> 249 cacagtcagg ctctcatgcaaggctc aacttgaattaa tgaaag	gaaat tatagttcac	agacttcaaa			60 120 156
<210> 250 <211> 1209 <212> DNA <213> Mus muscu	lus				
<pre><400> 250 ctgggtacca tgccac gacttctccc tggccc gcagagatga tggagc gaacagcaaa acaagg aaactggctg atgtcca acggccaaca gtgccc ctgaggcaga agctcc gcgtatagac aggagg gaatcgctgg aggagg ctccgggagc acctgg ctcacagcgg ccctga</pre>	ggggc gctcaatgct tcaa tgaccgcttt gcgct ggcagctgaa acca ggcggagctt ggct ggaggtggag aaga tgaaaccaac gcaca tgaagccacc gagat ccagttctta gccca acagcaggtc	ggcttcaagg gctagctaca ctgaaccagc cgggagctgc agggacaact ctgaggctgg ctggctcgtg aggaagatct cacgtggaga	agacacgggc tcgagaaggt ttcgagccaa ggctgcggct ttgcacagga aggcagagaa tggatttgga atgaggagga tggatgtggc	gagcgagcgi ccgcttcctg ggagcccacc ggaccagctt cctcggcacc caacctggct gagaaaggtt agttcgagat caagccagac	60 120 180 240 300 360 420 480 540 600 660

```
caagagacag aggagtggta tcggtctaag tttgcagacc tcacagacgc tgcgtcccgc
                                                                                                        720
aacgcagagc tcctccgcca agccaaacac gaagctaacg actatcgccg ccaactgcag
                                                                                                        780
gccttgacct gcgatctgga gtccctccgc ggcacgaacg agtccctaga gcggcaaatg
                                                                                                        840
                                                                                                        900
cgcgaacagg aagagcgcca tgcgcgggag tcggccagtt accaggaggc acttgctcgg
ctggaggagg agggccaaag cctcaaggag gagatggccc gccacctgca ggagtaccag gatctactca acgttaagct agccctggac atcgagatcg ccacctacag gaaattgctg gagggcgaag aaaaccgcat caccattcct gtacagactt tctccaacct ccagatccga gaaaccagcc tggacaccaa atccgtgtca gaaggccacc tcaagaggaa catcgtggta aagactgtgg agatgcgga tggtgaggtc attaaggact cgaagcagga gcacaaggac
                                                                                                        960
                                                                                                       1020
                                                                                                       1080
                                                                                                       1140
                                                                                                       1200
                                                                                                       1209
gtggtgatg
<210>
<211>
          135
<212>
          DNA
<213>
          Mus musculus
<400>
cttgctcggc tggaggagga gggccgaagc ctcaaggagg agatggcccg ccacctgcag
                                                                                                         60
gagtaccágg atctáctcáa cgttaágcta gccctggaca tcgagátcgc cacctacagg
                                                                                                        120
                                                                                                        135
aaattgctgg agggg
<210>
          252
<211>
          1353
<212>
          DNA
<213>
          Mus musculus
<400> 252
atggcaagcc ccactctgag cccggactcc tcatctcaag aggccctgtc agcacccacc
                                                                                                         60
tgčtccccaa cctctgačtč cgagaatctc agcccagatg agctagaact actggccaag
                                                                                                        120
ctcgaggagc agaaccggct cctggaagcc gactccaagt ccatgcgctc catgaatggc
                                                                                                        180
                                                                                                        240
tcccggagga acagtggctc ctcactggta tccagctcct cagcctcctc caacctgagc
cacctggagg aggacacgtg gattctctgg ggccgaattg ccaacgagtg ggaggagtgg cggcgcagga aggacacact actcaaggag ctgatccgga agggcatcc acaccacttt cgggccatcg tctggcagct cctgtgcagt gccacagata tgcccgtcaa aaaccagtac tctgagctcc tcaagatgtc ctcccatgt gagaaactca tcaggaggga tattgcccgc acctacccag agcatgaatt cttcaaaggc caggacagcc tgggccagga agtcctcttc
                                                                                                        300
                                                                                                        360
                                                                                                        420
                                                                                                        480
                                                                                                        540
aatgtcatga aggcatactc cctggttgat cgggaggtgg gctactgcca gggcagtgcc
                                                                                                        600
ttcattgtgg gcttactcct catgcagatg cctgaggaag aggccttctg tgtattcgtg
                                                                                                        660
                                                                                                        720
cgactgatgc aggagtaccg gctacgggag ctcttcaagc ccagcatggc cgagctggga
ctctgtatct accagtttga atacatgcta caggagcagc ttccggacct gaatacccac
                                                                                                        780
ttccgctcac agagcttca cacgtccatg tatgcatcgt cctggttcct tacgcttttc cttaccacct tcccctgcc tgttgccacc cgggtctttg atatctttat gtatgaggga ctggagattg tgttccgagt aggccttgcc ctgctgcaag tgaaccagac agagttgatg caactggaca tggagggcat gtcccagtac ttccagagag tcatcccca ccagtttgac agctgccag acaagctggt cctcaaggct tatcaggtca agtacaaccc taaaaagatg
                                                                                                        840
                                                                                                        900
                                                                                                        960
                                                                                                       1020
                                                                                                       1080
aagaggctgg agaaggagta cgcagctatg aagagtaaag agatggagga gcagatcgag
                                                                                                       1140
atcaaaaggc ttcgaacaga gaaccggctg ctcaaacagc ggattgagac cctagagaag
                                                                                                       1200
                                                                                                       1260
gggcaggtga cacgggcaca ggaggctgag gagaactatg tcatcaaacg ggagttggca
                                                                                                      1320
gtagtgagac aacagtgtag ctcgactgca gaggaccttc agaaagcaca gagtaccatt
cggcagttgc aagaacagca ggtacccggc ggt
                                                                                                       1353
<210>
          253
          312
<211>
<212>
          DNA
<213>
          Mus musculus
<400>
        253
                                                                                                         60
gccctgctgc aagtgaacca gacagagttg atgcaactgg acatggaggg catgtcccag
tacttccaga gagtcatccc ccaccagttt gacagctgcc cagacaagct ggtcctcaag gcttatcagg tcaagtacaa ccctaaaaaag atgaagaggc tggagaagga gtacgcagct atgaagagta aagagatgga ggagcagatc gagatcaaaa ggcttcgaac agagaaccgg
                                                                                                        120
                                                                                                        180
                                                                                                        240
ctgctcaaac agcggattgg gaccctagag aaggagagcg cggccttggc tgataggtta
                                                                                                        300
                                                                                                        312
atccaggggg ca
```

```
<210>
           254
           2889
 <211>
 <212>
           DNA
 <213>
           Mus musculus
 <400> 254
atggcggacc cggcggagtg caacatcaaa gtgatgtgtc gcttcagacc tctcaacgaa
                                                                                                                   60
tctgaagtga accgcggcga taagtacgtc gccaaattcc agggagaaga cacggtcgtg
                                                                                                                  120
atcgcgtcca agccttatgc atttgatcgg gtgttccagt caagcacatc tcaagagcaa gtgtataatg actgtgcaaa gaagattgtt aaagatgtac ttgaaggata taatggaaca
                                                                                                                  180
                                                                                                                  240
                                                                                                                  300
atatttgcat atggacaaac atcctctggg aagacccaca cgatggaggg taaacttcat
                                                                                                                  360
gatccagaag gcatgggaat tattccaaga atagtgcaag atattttaa ttatatttac
tccatggatg aaaatttgga atttcatatt aaggtttcat attttgaaat atatttggat
                                                                                                                  420
aagataaggg acttgttaga tgtttcaaag actaaccttt cagtccatga agacaaaaac cgtgttccct atgtaaaggg gtgcacagaa cgtttcgtgt gtagtccaga tgaagtcatg gataccatag atgaagggaa atccaacaga catgtcgcag ttacaaatat gaatgaacat agctctagga gtcacagcat atttcttatt aatgtaaaac aagagaatac acaaacggaa
                                                                                                                  480
                                                                                                                  540
                                                                                                                  600
                                                                                                                  660
caaaagctga gtggaaaact ttatctggtt gatttagctg gtagtgaaaa ggttagtaaa actggagctg aaggtgctgt gctggatgaa gctaaaaaca tcaacaagtc actttctgct
                                                                                                                  720
                                                                                                                  780
cttggaaatg ttatttctgc tttggctgag ggtagtacat atgttccata tcgagatagt
                                                                                                                  840
                                                                                                                  900
aaaatgacaa gaatccttca agattcatta ggtggcaact gtagaaccac tattgtaatt
tgctgctctc catcatcata caatgagtct gaaacaaaat ctacactctt atttggccaa agggccaaaa caattaagaa cacagtctgt gtcaatgtag agttaactgc ggagcagtgg aaaaagaagt atgaaaaaga aaaggaaaaa aataaaactc tacggaacac tattcagtgg ctggaaaacg agctaaaccg ttggcgtaac ggggagacag tgcctattga tgagcagttt gacaaagga aagctaattt ggaagccttc acagcggata aagatattgc tattaccagt
                                                                                                                  960
                                                                                                                1020
                                                                                                                1080
                                                                                                                1140
                                                                                                                1200
gataaaggag ctgctgcagt cggaatggct ggtagtttta ccgatgctga aagaagaaag
                                                                                                                1260
tgtgaagaag aacttgctaa attgtataaa caacttgatg acaaggatga agagattaac
                                                                                                                1320
caacaaagcc aattggtaga gaaattgaag acacaaatgc tggatcagga agagcttctg
                                                                                                                1380
gcatcaacca gaagggatca agataatatg caagctgaac tgaatcgcct ccaagcagaa
                                                                                                                1440
äatgatgctt čtaäägaaga agtcaaagaa gttttačagg cčttagägga actggctgtt
                                                                                                                1500
aattatgatc agaagtctca ggaagttgaa gacaaaacaa aggaatatga attgcttact
gatgaattca atcaaaaatc tgcaacttta gcaagtattg atgctgagct tcagaagctg
aaggaaatga ccaaccacca gaagaaacga gcagctgaaa tgatggcatc attattaaaa
gaccttgcag aaataggaat tgctgtgggg aataacgatg tgaagcaacc agaaggaact
                                                                                                                1560
                                                                                                                1620
                                                                                                                1680
                                                                                                                1740
ggtatgatag atgaagagtt tactgttgca agactctaca ttagcaaaat gaaatcagaa
                                                                                                                1800
gtaaagacca tggtgaaacg ctgcaaacag ctagaaagca cacagactga gagcaacaaa
                                                                                                                1860
aaaatggaag aaaatgagaa agagttagca gcatgccagc ttcggatctc ccaacatgaa
                                                                                                                1920
gccaaaatca agtcactgac tgagtacctt cagaatgatg aacaaaagaa gaggcagctg gaggagtctc ttgattccct tggtgaggag ctagtccaac tccgagcaca agagaaagtc catgaaatgg aaaaagagca cttgaacaag gttcagactg caaatgaagt caagcaagct gttgagcagc agatccagag tcacagagaa acccaccaaa aacaaatcag tagtttgcga gatgaagtgg aggcaaagga aaagctaatc actgacctcc aagaccaaaa ccagaagatg
                                                                                                                1980
                                                                                                                2040
                                                                                                                2100
                                                                                                                2160
                                                                                                                2220
gtgttggaga cggaacggct aagggtggag catgagaggc tgaaggctac agaccaagag
                                                                                                                2280
aagagcagga agctgcacga gctcacggtt atgcaagaca gacgagaaca agcaagacaa
                                                                                                                2340
                                                                                                                2400
gacttgaagg gtttggagga gaccgtggca aaagaacttc agactttaca caacctgcgt
                                                                                                                2460
aagctctttg ttcaggactt ggctaccagg gtgaaaaaga gcgccgaggt cgactctgac
                                                                                                                2520
gacactggcg gcagtgctgc acagaagcag aaaatctcct tccttgaaaa caaccttgaa
cagctcacca aagtgcacaa gcagttggta cgcgataatg cagatcttcg ctgtgaactt cctaagttag agtttcggct tagagctact gcagaaagag tgaaagcttt ggagtcagcc ctgaaagaag ccaaagaaaa tgcatctcga gaccgtaaac gctatcagca agaagtagac cggataaagg aagcagtcag gtcaaagaac atggccagaa ggggacattc tgcccagatt gcaaagccga tccgtcctgg acagcatcca gcggcctcgc caactcaccc gggcacagtt cgtggaggag gctcatttgt tcagaacaac cagccagtgg ggcttcgtgg tggtggaggc
                                                                                                                2580
                                                                                                                2640
                                                                                                                2700
                                                                                                                2760
                                                                                                                2820
                                                                                                                2880
                                                                                                                2889
aagcagtcg
<210>
           255
<211>
           135
<212>
           DNA
 <213>
           Mus musculus
<400> 255
60
                                                                                                                  120
```

gaaaaaaata aaactctacg gaacactatt cagtggctgg aaaacgagct aaaccgttgg

<210> 256 <211> 5346 <212> DNA

<213> Artificial Sequence

<220>

<223> vector CMV-FosCBPzz

<400> 256 atgcattagt tattaatagt aatcaattac ggggtcatta gttcatagcc catatatgga gttccgcgtt acataactta cggtaaatgg cccgcctggc tgaccgccca acgacccccg cccattgacg tcaataatga cgtatgttcc catagtaacg ccaataggga ctitccattg acgtcaatgg gtggagtatt tacggtaaac tgcccacttg gcagtacatc aagtgtatca tatgccaagt acgccccta ttgacgtcaa tgacggtaaa tggcccgcct ggcattatgc ccagtacatg accttatggg actttcctac ttggcagtac atctacgtat tagtcatcgc tattaccatg gtgatgcggt tttggcagta catcaatggg cgtggatagc ggtttgactc acgggggattt ccaagtctcc accccattga cgtcaatggg agtttgttt ggcaccaaaa tcaacgggac tttccaaaat gtcgtaacaa ctccgcccca ttgacgcaaa tgggcggtag gcgtgtacgg tgggaggtct atataagcag agctggttta gtgaaccgtc agatccgcta gcgattacgc caagctcgaa attaaccctc actaaaggga acaaaagctg gagctccacc gcggtggcgg ccgctctagc ccgggcggat cacgatcccg cgaaattaat acgactcact ataggggaat tgtgagcgga taacaattcc cctctagaaa taattttgtt taactttaag aaggagatat accatggcta gcatgactgg tggacagcaa atgggtcgcg gatccccggt ctacgccaac ctcagcaact tcaacccggg tgcgctgagc agcggcggtg gggcgcctc ctatggcgcg gccgggctgg cctttccctc gcagccgcag cagcagcagc agccgcctca gccgccgcac cacttgccc aacagatccc ggtgcagcac ccgcggctgc aagccctgaa ggaagagccg cagaccgtgc cggagatgcc gggagagacg ccgcccctgt cccctatcga catggagtct caggagcgga tcaaggcaga gaggaagcgc atgaggaacc gcattgccgc ctccaagtgc cggaaaagga agctggagcg gatcgctcgg ctagaggaaa aagtgaaaac cttgaaagcg caaaactccg agctggcatc cacggccaac atgctcaggg aacaggtggc acagcttaag cagaaagtca tgaaccacgt tctcgagctc aagagaagat ggaaaaagaa tttcatagcc gtctcagcag ccaaccgctt taagaaaatc tcatcctccg gggcacttgg ataagattat gatattcaa ctactgctag cgagaatttg tatttcaag gtggtaccaa aaccgcggct cttgcgcaac acgatgaagc cgtagaacaac aaattcaaca aagagaacac aaacgcgttc tatgagatct tacatttacc taacttaaac gaagaacaac gaaacgcctt catccaaagt ttaaaagatg acccaagcca aagcgctaac cttttagcag aagctaaaaa gctaaatgat gctcaggcgc cgaaagtaga caacaaattc aacaaagaac aacaaaacgc gttctatgag atcttacatt tacctaactt aaacgaagaa caacgaaacg ccttcatcca aagtttaaaa gatgacccaa gccaaagcgc taacctttta gcagaagcta aaaagctaaa tgatgctcag gcgccgaaag tagacgcgaa ttctagctct gtaccccatc accatcacca tcactaagtc gacttcgatc gcccttccca acagttgcgc agcctgaatg gcgaatggag atccaatttt taagtgtata atgtgttaaa ctactgattc taattgtttg tgtattttag attcacagtc ccaaggctca tttcaggccc ctcagtcctc acagtctgtt catgatcata atcagccăta ccacătttgt agaggtttta cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt titticactg cattctagtt gtggtttgtc caaactcatc aatgtatctt aacgcgtaaa ttgtaagcgt taatattttg ttaaaattcg cgttaaattt ttgttaaatc agctcattt ttaaccaata ggccgaaatc ggcaaaatcc cttataaatc aaaagaatag accgagatag ggttgagtgt tgttccagtt tggaacaaga gtccactatt aaagaacgtg gactccaacg tcaaagggcg aaaaaaccgtc tatcagggcg atggcccact acgtgaacca tcaccctaat caagtttttt ggggtcgagg tgccgtaaag cactaaatcg gaaccctaaa gggagccccc gatttagagc ttgacgggga aagccggcga acgtggcgag aaaggaaggg aagaaagcga aaggagcggg cgctagggcg ctggcaagtg tagcggtcac gctgcgcgta accaccacac ccgccgcgct taatgcgccg ctacagggcg cgtcaggtgg cacttttcgg ggaaatgtgc gcggaacccc tatttgtta tttttctaaa tacattcaaa tatgtatccg ctcatgagac aataaccctg ataaatgctt caataatatt gaaaaaggaa gaatcctgag gcggaaagaa ccagctgtgg aatgtgtgtc agttagggtg tggaaagtcc ccaggctccc cagcaggcag aagtatgcaa agcatgcatc tcaattagtc agcaaccagg tgtggaaagt ccccaggctc cccagcaggc agaagtatgc aaagcatgca tctcaattag tcagcaacca tagtcccgc cctaactccg cccatcccgc ccctaactcc gcccaffcc gccaffctc agctattca agctattca ttttttattt atgcagaggc cgaggccgcc tcggcctctg agctattcca gaagtagtga

```
ggaggctttt ttggaggcct aggcttttgc aaagatcgat caagagacag gatgaggatc
                                                                                                                                             3240
 ġtttcgcatg attgaacaag atggattgca cgcaggttct ccggccgctt gggtggagag
                                                                                                                                              3300
 gctattcggc tatgactggg cacaacagac aātcģģctgc tctgatgccg ccgtgttccg
                                                                                                                                              3360
gctgtcagcg caggggcgc cggttctttt tgtcaagacc gacctgtccg gtgccctgaa tgaactgcaa gacgaggcag cgcggctatc gtggctggc acgacgggcg ttccttgcgc agctgtgctc gacgttgtca ctgaagcggg aagggactgg ctgctattgg gcgaagtgcc ggggcaggat ctcctgtcat ctcaccttgc tcctgccgag aaagtatcca tcatggctga tgcaatgcgg cggctgcata cgcttgatcc ggctactgc ccattcgacc accaagcgaa acatcgcatc gagcgagcac gtactcgac ggaagctggt cttgtcgatc aggatgatcat
                                                                                                                                              3420
                                                                                                                                              3480
                                                                                                                                              3540
                                                                                                                                              3600
                                                                                                                                              3660
                                                                                                                                              3720
ggacgaagaa čatcaggggc tcgcgccagc cgaactgttc gccaggctca aggcgagcat
                                                                                                                                              3780
gcccgacggc gaggatctcg tcgtgaccca tggcgatgcc tgcttgccga atatcatggt
                                                                                                                                              3840
ggaaaatggc cgcttttctg gattcatcga ctgtggccgg ctgggtgtgg cggaccgcta
tcaggacata gcgttggcta cccgtgatat tgctgaagaa cttggcggcg aatgggctga
                                                                                                                                              3900
                                                                                                                                             3960
ccgcttcctc gtgctttacg gtatcgccgc tcccgattcg cagcgcatcg ccttctatcg ccttcttgac gagttcttct gagcgggact ctggggttcg aaatgaccga ccaagcgacg cccaacctgc catcacgaga tttcgattcc accgccgct tctatgaaag gttgggcttc ggaatcgttt tccgggacgc cggctggatg atcctccagc gcggggatct catgctggag ttcttcgccc accctagggg gaggctaact gaaacacgga aggagacaat accggaagga acccgcgcta tgacggcaat aaaaagacag aataaaacgca acggtgttgg gtcgttgtt
                                                                                                                                             4020
                                                                                                                                             4080
                                                                                                                                             4140
                                                                                                                                             4200
                                                                                                                                             4260
                                                                                                                                             4320
cataaacgcg gggttcggtc ccagggctgg cactctgtcg ataccccacc gagaccccat
tggggccaat acgcccgcgt ttcttccttt tccccaccc acccccaag ttcgggtgaa
                                                                                                                                              4380
                                                                                                                                             4440
ggcccagggc tcgcagccaa cgtcggggcg gcaggccctg ccatagcctc aggttactca tatatacttt agattgattt aaaacttcat ttttaattta aaaggatcta ggtgaagatc
                                                                                                                                             4500
                                                                                                                                             4560
ctttttgata atctcatgac caaaatccct taacgtgagt tttcgttcca ctgagcgtca gaccccgtag aaaagatcaa aggatcttct tgagatcctt tttttctgcg cgtaatctgc tgcttgcaaa caaaaaaacc accgctacca gcggtggttt gtttgccgga tcaagagcta ccaactcttt ttccgaaggt aactggcttc agcagagcgc agataccaaa tactgtcctt
                                                                                                                                             4620
                                                                                                                                             4680
                                                                                                                                             4740
                                                                                                                                             4800
 ctagtgtagc cgtagttagg ccaccacttc aagaactctg tagcaccgcc tacatacctc
                                                                                                                                             4860
gctctgctaa tcctgttacc agtggctgct gccagtggcg ataagtcgtg tcttaccggg
                                                                                                                                             4920
ttggactcaa gacgatagtt accggataag gcgcagcggt cgggctgaac ggggggttcg tgcacacagc ccagcttgga gcgaacgacc tacaccgaac tgagatacct acagcgtgag ctatgagaaa gcgccacgct tcccgaaggg agaaaggcgg acaggtatcc ggtaagcggc agggtcggaa caggagagcg cacgagggag cttccagggg gaaacgcctg gtatctttat agtcctgtcg ggtttcgcca cctctgactt gagcgtcgat ttttgtgatg ctcgtcaggg ggggggagcc tatggaaaaa cgccagcaac gcggcctttt tacggttcct ggccttttgctggccttttg ctcacatgtt ctttcctgcg ttatcccctg attctgtgga taaccgtatt
                                                                                                                                             4980
                                                                                                                                             5040
                                                                                                                                             5100
                                                                                                                                              5160
                                                                                                                                              5220
                                                                                                                                              5280
                                                                                                                                              5340
accqcc
                                                                                                                                              5346
              257
 <210>
 <211>
              70
 <212>
              DNA
 <213>
              Artificial Sequence
 <220>
 <223>
              PCR primer 5'SP6(029)T7-FosCBPzz
<400>
              257
gaatttaggt gacactatag aacaacaaca acaacaaaca acaacaaaat ggctagcatg
actggtggac
<210>
              258
<211>
              20
 <212>
              DNA
 <213>
             Artificial Sequence
 <220>
 <223>
              PCR primer 3'FosCBPzz
<400> 258
ggatctccat tcgccattca
                                                                                                                                                 20
<210>
              259
 <211>
              89
 <212>
              DNA
```

```
<213> Artificial Sequence
<220>
<223>
       DNA beit template DNA-Fos/Jun
<400> 259
cgactctgac ggcagtttac gtgactcatg agtcatgact catgagtcat gactcatgag
                                                                         60
tcacgttaga acgcggctac aattaatac
                                                                         89
<210>
       260
<211>
       21
<212>
      DNA
      Artificial Sequence
<213>
<220>
<223>
      PCR primer 5'DNA
<400> 260
cgactctgac ggcagtttac g
                                                                         21
<210>
       261
<211>
       26
<212>
       DNA
<213>
       Artificial Sequence
<220>
<223>
       PCR primer 3'DNA
<400> 261
gtattaattg tagccgcgtt ctaacg
                                                                         26
<210> 262
<211>
      67
<212>
       DNA
<213>
      Artificial Sequence
<220>
<223>
      main chain of adaptor
<400> 262
gaacaacaac aacaacaaac aacaacaaaa tgactggtgg acagcaaatg ggtgcggccg
                                                                         60
cgaattc
                                                                         67
<210>
      263
<211>
       68
<212>
      DNA
<213>
      Artificial Sequence
<220>
<223>
      main chain of adaptor
<400> 263
gaacaacaac aacaacaaac aacaacaaaa tggctagcat gactggtgga cagcaaatgg
                                                                         60
cgaattcc
                                                                         68
<210>
       264
       32
<211>
<212>
      DNA
<213>
      Artificial Sequence
<220>
<223>
       random primer for reverse transcription
<220>
```

```
<221> misc_feature
 <222>
              (24)..(32)
 <223>
             n = a, g, c or t
 <400>
             264
tcatcgtcct tgtagtcaag cttnnnnnn nn
                                                                                                                                      32
<210>
              265
              58
<211>
 <212>
             DNA
             Artificial Sequence
 <213>
 <220>
 <223>
             PCR 5' primer (029)
 <400>
                                                                                                                                      58
ggaagatcta tttaggtgac actatagaac aacaacaaca acaaacaaca acaaaatg
<210>
              266
<211>
              36
 <212>
             DNA
<213>
             Artificial Sequence
<220>
             PCR 3' primer
<223>
<400> 266
tttttttttt tgtcgtcatc gtccttgtag tcaagc
                                                                                                                                      36
<210>
              267
<211>
              3851
 <212>
             DNA
             Artificial Sequence
 <213>
<220>
<223> pDrive vector
<400> 267
gcgcccaata cgcaaaccgc ctctccccgc gcgttggccg attcattaat gcagctggca cgacaggttt cccgactgga aagcgggcag tgagcgcaac gcaattaatg tgagttagct cactcattag gcaccccagg ctttacactt tatgcttccg gctcgtatgt tgtgtggaat tgtgagcgga taacaatttc acacaggaaa cagctatgac catgattacg ccaagctcta atacgactca ctatagggaa agctcggtac cacgcatgct gcagacgcgt tacgtatcgg accagaatt cgtgatatct gaattcgcg acacgcttct cgagcctagg cctaaatgg
                                                                                                                                      60
                                                                                                                                    120
                                                                                                                                    180
                                                                                                                                    240
                                                                                                                                    300
                                                                                                                                    360
accacacgtg tgggggcccg agctcgcggc cgctgtattc tatagtgtca cctaaatggc
                                                                                                                                    420
cgcacaatte actggeegte gttttacaae gtcgtgactg ggaaaaccet ggegttacee
                                                                                                                                    480
aacttaatcg ccttgcagca catcccctt tcgccagctg gcgtaatagc gaagaggccc
                                                                                                                                    540
gcaccgatcg cccttcccaa cagttgcgca gcctgaatgg cgaatggaaa ttgtaagcgt taatattttg ttaaaattcg cgttaaattt ttgttaaatc agctcatttt ttaaccaata ggccgaaatc ggcaaaatcc cttataaatc aaaagaatag accgagatag ggttgagtgt tgttccagtt tggaacaaga gtccactatt aaagaacgtg gactccaacg tcaaagggcg aaaaaccgtc tatcagggcg atggcccact acgtgaacca tcaccctaat caagttttt
                                                                                                                                    600
                                                                                                                                    660
                                                                                                                                    720
                                                                                                                                    780
                                                                                                                                    840
ggggtcgagg tgccgtaaag cactaaatcg gaaccctaaa gggagccccc gatttagagc
ttgacgggga aagccggcga acgtggcgag aaaggaaggg aagaaagcga aaggagcggg
                                                                                                                                    900
                                                                                                                                    960
cgctagggcg ctggcaagtg tagcggtcac gctgcgcgta accaccacac ccgccgcgct
                                                                                                                                  1020
taatgcgccg ctacagggcg cgtcaggtgg cacttttcgg ggaaatgtgc gcggaacccc
                                                                                                                                  1080
tattgttta ttttctaaa tacattcaaa tatgtatccg ctcatgagac aataaccctg ataaatgctt caataatatt gaaaaaggaa gagtatgagt attcaacatt tccgtgtcgc ccttattccc ttttttgcgg cattttgcct tcctgttttt gctcacccag aaacgctggt gaaagtaaaa gatgctgaag atcagttggg tgcacgagtg ggttacatcg aactggatct caacagcggt aagatccttg agagtttcg ccccgaagaa cgtttccaa tgatgagcac ttttaaagtt ctgctatgtg gcgcggtatt atcccgtatt gacgccgggc aagagcacact cggtcgccgc atacactatt cccagaatga cttgttagag tactcaccag tcacagaaaa
                                                                                                                                  1140
                                                                                                                                  1200
                                                                                                                                  1260
                                                                                                                                  1320
                                                                                                                                  1380
                                                                                                                                  1440
                                                                                                                                  1500
gcatcttacg gatggcatga cagtaagaga attatgcagt gctgccataa ccatgagtga
                                                                                                                                  1560
```

83

```
taacactgcg gccaacttac ttctgacaac gatcggagga ccgaaggagc taaccgcttt
                                                                                                                       1620
tttgcacaac atggggggatc atgtäactcg ccttgätcgt tgggaaccgg agctgaatga
                                                                                                                       1680
agccatacca aacgacgagc gtgacaccac gatgcctgta gcaatggcaa caacgttgcg
                                                                                                                       1740
agcCatacca aacgacgage gtgacaccae yatyceiyta yeaatyytaa caacytiyey caaactatta actggcgaac tacttactct agcttcccgg caacaattaa tagactggat ggaggcggat aaagttgcag gaccacttct gcgctcggce cttccggctg gctggtttat tgctgataaa tctggagccg gtgagcgtgg gtctcgcggt atcattgcag cactggggcc agatggtaag ccctcccgta tcgtagttat ctacacgacg gggagtcagg caactatgga tgaacgaaat agacagatcg ctgagatagg tgcctcactg attaagcatt ggtaactgtc agaccaagtt tactcatata tactttagat tgatttaaaa cttcatttt aatttaaaag
                                                                                                                       1800
                                                                                                                       1860
                                                                                                                       1920
                                                                                                                       1980
                                                                                                                       2040
                                                                                                                       2100
gatctaggtg aagatccttt ttgataatct catgaacaat aaaactgtct gcttacataa
                                                                                                                       2160
acagtaatac aaggggtgtt atgagccata ttcaacggga aacgtcttgc tctaggccgc
                                                                                                                       2220
gattaaattc caacatggat gctgatttat atgggtataa atgggctcgc gataatgtcg
                                                                                                                       2280
ggcaatcagg tgcgacaatc tatcgattgt atgggaagcc cgatgcgcca gagttgtttc
                                                                                                                       2340
tgaaacatgg caaaggtagc gttgccaatg atgttacaga tgagatggtc agactaaact ggctgacgga atttatgcct cttccgacca tcaagcattt tatccgtact cctgatgatg
                                                                                                                       2400
                                                                                                                       2460
catggttact caccactgcg atccccggga aaacagcatt ccaggtatta gaagaatatc ctgattcagg tgaaaatatt gttgatgcgc tggcagtgtt cctgcgccgg ttgcattcga ttcctgtttg taattgtcct tttaacagcg atcgcgtatt tcgtctcgct caggcgcaat
                                                                                                                       2520
                                                                                                                       2580
                                                                                                                       2640
cacgaatgaa taacggtttg gttgatgcga gtgattttga tgacgagcgt aatggctggc
                                                                                                                       2700
                                                                                                                       2760
ctgttgaaca agtctggaaa gaaatgcata aacttttgcc attctcaccg gattcagtcg
tcactcatgg tgattictca cttgataacc ttattttīga cgaggggaaā ttaataggtī
                                                                                                                       2820
gtattgatgt tggacgagtc ggaatcgcag accgatacca ggatcttgcc atcctatgga actgcctcgg tgagttttct ccttcattac agaaacggct ttttcaaaaa tatggtattg ataatcctga tatgaataaa ttgcagtttc atttgatgct cgatgagttt ttctaagaat taattcatga ccaaaatccc ttaacgtgag ttttcgttcc actgagcgtc agaccccgta gaaaagatca aaggatcttc ttgagatcct ttttttctgc gcgtaatctg ctgcttgcaa
                                                                                                                       2880
                                                                                                                       2940
                                                                                                                       3000
                                                                                                                       3060
                                                                                                                       3120
acaaaaaaac caccgctacc agcggtggtt tgtttgccgg atcaagagct accaactctt
                                                                                                                       3180
tttccgaagg taaciggctt cágcágágcg cágatáccáá atactgtéct tctagtgtag
                                                                                                                       3240
ccgtagttag gccaccactt caagaactct gtagcaccgc ctacatacct cgctctgcta
                                                                                                                       3300
atcctgttac cagtggctgc tgccagtggc gataagtcgt gtcttaccgg gttggactca agacgatagt taccggataa ggcgcagcgg tcgggctgaa cggggggttc gtgcacacag cccagcttgg agcgaacgac ctacaccgaa ctgagatacc tacagcgtga gctatgagaa agcgccacgc ttcccgaagg gagaaaggcg gacaggtatc cggtaagcgg cagggtcgga acaggagagc gcacgaggga gcttccaggg ggaaacgcct ggtatcttta tagtcctgtc gggtttcgcc acctctgact tgagcgtcga tttttgtgat gctcgtcagg ggggggagc ctatggaaaa cgccagcaa cgcggccctt tattggaata tottcctgac gttatcctt
                                                                                                                       3360
                                                                                                                       3420
                                                                                                                       3480
                                                                                                                       3540
                                                                                                                       3600
                                                                                                                       3660
                                                                                                                       3720
gctcacatgt tcittcctgc gitaicccct gattcigtgg afaaccgtai taccgccttt
                                                                                                                       3780
                                                                                                                       3840
gagtgagctg ataccgctcg ccgcagccga acgaccgagc gcagcgagtc agtgagcgag
                                                                                                                       3851
gaagcggaag a
            268
<210>
<211>
            58
<212>
            DNA
<213>
            Artificial Sequence
<220>
<223>
           primer 5'F3
<400> 268
ggaagatcta tttaggtgac actatagaac aacaacaaca acaacaaca acaaaatg
                                                                                                                          58
<210>
            269
<211>
            27
<212>
 <213>
           Artificial Sequence
<220>
<223> primer 3'R3
<400> 269
                                                                                                                          27
ttttttttct cgagcttgtc gtcatcg
<210>
          270
<211> 18
```

	DNA Artificial Sequence	
<220> <223>	primer SNAP19_F	
	270 tgct gcgtctaa	18
<211> <212>	271 19 DNA Artificial Sequence	
<220> <223>	primer SNAP19_R	
	271 gatt gaagggcta	19
<211> <212>		
<220> <223>	primer Kif5C_F	
<400> tggtcc	272 ggga caatgcag	18
<210> <211> <212> <213>	19	
<220> <223>	primer Kif5C_R	
<400> ggcctc	273 tttc agcgcactc	19
<210> <211> <212> <213>		
<220> <223>	primer kif5A_F	
	274 gtac gtgacaatgc	20
<210> <211> <212> <213>		
<220> <223>	primer kif5A_R	
<400>	275	20

```
<210> 276
<211>
      19
<212> DNA
<213> Artificial Sequence
<220>
<223>
      primer Eef1d_F
<400> 276
gagaaccaga accttcgag
                                                                         19
<210>
      277
<211>
      18
<212> DNA
<213> Artificial Sequence
<220>
<223> primer Eef1d_R
<400> 277
                                                                         18
tcggggagta ggtgaact
<210> 278
<211>
      18
<212> DNA
<213> Artificial Sequence
<220>
<223> primer Nef3_F
<400> 278
                                                                         18
ggaaccaagt gggaaatg
<210> 279
<211> 19
<212> DNA
<213> Artificial Sequence
<220>
<223> primer Nef3_R
<400> 279
                                                                         19
ccctctagga gtttcctgt
<210> 280
<211> 20
<212>
      DNA
<213> Artificial Sequence
<220> <223> primer Jip-c3.1_F
<400> 280
                                                                         20
agctggagaa agaggtgtca
<210>
       281
<211>
      18
<212>
       DNA
      Artificial Sequence
<213>
<220>
      primer Jip-c3.1_R
<223>
<400> 281
```

CaCaaa	ctcc cggtgtag	TR
<212>	282 18	
<220> <223>	primer Jip-c1_F	
<400> cctgga	282 agac caaatcaa	18
<210> <211> <212> <213>	283 20 DNA Artificial Sequence	
<220> <223>	primer Jip-c1_R	
	283 ggat ctccactttc	20
<210> <211> <212> <213>	20	
<220> <223>	primer EB2_F	
<400> ggactt	284 gaag ctgaccgtag	20
<210> <211> <212> <213>	18	
<220> <223>	primer EB2_R	
	285 tgcc cgagatga	18
<210> <211> <212> <213>	286 19 DNA Artificial Sequence	
<220> <223>	primer Cspg6_F	
<400> gctctg	286 aatg atgaaatcc	19
<210> <211> <212> <213>	287 20 DNA Artificial Sequence	
<220> <223>	primer Cspg6_R	

<400> tctgat	287 gttg tggcagtaag	20
<212>	288 18 DNA Artificial Sequence	
<220> <223>	primer Mapk8ip3_F	
<400> cattgc	288 taag gttgacca	18
<210> <211> <212> <213>	289 20 DNA Artificial Sequence	
<220> <223>	primer Mapk8ip3_R	
<400> gttact	289 gcct ctgacttgac	20
<210> <211> <212> <213>		
<220> <223>	primer Jip-xc3.2_F	
<400> aggctc	290 tcat taccacagat	20
<210> <211> <212> <213>		
<220> <223>	primer Jip-c3.2_R	
<400> ctcgcg	291 cttt cattaattc	19
<211> <212>	292 18 DNA Artificial Sequence	
<220> <223>	primer GFAP_F	
<400> ggaggg	292 ccaa agcctcaa	18
<210><211><211><212><213>	22	

<220> <223>	primer GFAP_R	
<400> cctcca	293 gcaa tttcctgtag gt	22
<210> <211> <212> <213>	19	
<220> <223>	primer Jip-c8_F	
<400> tggtcc	294 tcaa ggcttatca	19
<210> <211> <212> <213>	20	
<220> <223>	primer Jip-c8_R	
<400> atctgc	295 tcct ccatctcttt	20
<210> <211> <212> <213>	22	
<220> <223>	primer Kif5B_F	
<400> cggagc	296 agtg gaaaaagaag ta	22
<210> <211> <212> <213>	18	
<220> <223>	primer Kif5B_R	
<400> acgcca	297 acgg tttagctc	18
<210> <211> <212> <213>	298 21 DNA Artificial Sequence	
<220> <223>	primer 5'M13_F	
<400> gtttc	298 ccag tcacgacgtt g	21
<210> <211> <212>	299 24 DNA	

```
<213> Artificial Sequence
<220>
<223> primer 3'M13_R
<400> 299
gaaacagcta tgaccatgat tacg
```